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NR. 2. KIRSTINE SMITH: INVESTIGATIONS OF PLAICE FROM THE WESTERN BALTIC JUNE 1921—AUGUST 1922.

KØBENHAVN
C. A. REITZEL, BOGHANDEL
BIANCO LUNOS BOGTRYKKERI
1923

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INVESTIGATIONS OF PLAICE FROM THE WESTERN BALTIC

JUNE 1921—AUGUST 1922

BY

DR. KIRSTINE SMITH

KØBENHAVN
C. A. REITZEL, BOGHANDEL
BIANCO LUNOS BOGTRYKKERI
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I. Introduction.

Among practical fishermen it has during the last ten years been a general opinion that an improvement in the quality of the plaice could be noticed in the Belt Sea. Already in the Fiskeri-Beretning for 1912 the occurrence was mentioned of especially large plaice, which weighed up to 10 kilograms per score and thus very much surpassed the usual average weight of 4—6 kilograms per score, which was observed during the first decade of the century[1]. In 1920 Dr. C. G. Joh. Petersen[2] examined a smaller number of samples from the Belt Sea, which, compared with samples taken during the years 1900—1910, suggested that the character of the stock of plaice had altered in the meantime.

The Danish Commission for the Study of the Sea has now procured a material of measurements, which, in connection with various samples analysed according to age, proves than an essential alteration has taken place. As the stock of plaice varies very much within waters in which the salinity, the condition of the bottom, and the nature of the bottom fauna differ from place to place as widely as in the Belt Sea, it was preferable to limit the measurements to a closer investigation of a rather narrowly limited area, in which measurements had been taken during the years 1910 and 1911. The new measurements, which Dr. A. C. Johansen has handed to me for statistical treatment, are undertaken in Bagenkop (see Fig. 1) by Mr. Chr. Erichsen. The samples measured are taken from landings arising from a small area about the south end of Langeland. Measurements were undertaken in June—Aug. 1921, recommenced in Jan. 1922, and, interrupted only by the period of strong frost, which stopped the fishing, continued till late in April. All these measurements concern fish taken inside the area marked "I" in Fig. 1. In June—Aug. 1922 samples have been sought more particularly among landings from Langelandsbelt (Area II) and Ristingebugt (Area III), an area more fished in 1910—1911 than now, when fishing, on the whole, takes place in deeper waters than formerly. Besides the length of the plaice the sex has also been determined. It appears that the relative frequency of males and females among the market plaice from this locality varies distinctly according to the season, from which it follows that the average length of the market plaice also exhibits a seasonal variation.

II. Measurements of Length carried out in 1921 and 1922.

A total number of 37,254 plaice have been measured distributed over 271 samples, which accordingly contain on an average 137 individuals each. The measurements are given in centimeters with neglection of exceeding factions of centimeters. The samples occured in catches taken with gillnet and Skovlvaad, the latter fishing-gear being a kind of small ottertrawl, without wings, the head line of which is 5 m of length and the foot-rope of which only carries a weight of 20 kilograms at the most. It is found that samples from catches taken with the two different gears show some difference of length varying apparently with the season, and the samples have therefore been sorted according to the fishing-gear.

[1] Vide A. C. Johansen: Om Rødspætten og Rødspættefiskeriet i Belthavet. Skrifter udgivne af Kommissionen for Havundersøgelser No. 7. 1912. Table 43 p. 117.

[2] C. G. Joh. Petersen: Report from the Danish Biological Station 1920.

Fig. 1. Chart of the Western Baltic showing the areas in which the landings sampled have been caught.

The measurements are carried out on land and the landings from which the samples are taken are influenced by the restricting laws of trade. It is permitted now to land plaice of a total length over 22.0 cm on the Danish coasts of this part of the western Baltic, but only for local use or direct export abroad. For general purchase in Denmark a minimum length of 25.7 cm is required, and practically no plaice under this limit is landed.

The means of the individual samples (see Tables of Measurements) indicate on the whole a great uniformity in the composition of the samples for consecutive days. When we consider for instance the 41 samples taken with Skovlvaad from June 5. to August 4., we find the standard deviation of the mean values directly calculated from these to be 0.72 for males and 0.70 for females, while a theoretical determination of the same St. D. by means of the St. D.'s inside each of the first 11 samples is found to be 0.40 for males and 0.34 for females. The same uniformity appears as strikingly in the 51 samples taken with gillnett in the period July 5.—August 28. Again, in these cases the St. D. of a mean is only about twice the St. D. theoretically expected for a mean of a sample because of the limited number of individuals in the sample. A similar regularity can be observed in the following period of observations, but then suddenly the figures may change.

Table 1. Measurements of Plaice in the Western Baltic 1921—1922.

Period of Measurement	Fishing-gear	♂ Average Length in cm	♀ Average Length in cm	♂ + ♀ Average Length in cm	Percentage of Individ. smaller than 30 cm	Percentage of Individ. between 30 and 35 cm	Percentage of Individ. greater than 35 cm	Average Weight in gr.	Percentage of Female Individuals	Number of samples	Number of Individuals	Average Depth of Fishing-place in m
	Locality: South and south-west of Langeland											
June 5.—Aug. 4. 1921.	Skovlvaad	32.30 ± .11	36.10 ± .11	34.94 ± .12	9 ± 1	40 ± 1	51 ± 2	396	70 ± 1	41	5606	22
Aug. 28.—31. 1921....	—	30.27	32.09	31.49	38	46	16	291	61	6	1034	23
Jan. 3—13. 1922.....	—	31.57 ± .19	37.85 ± .29	34.81 ± .20	19 ± 1	33 ± 1	48 ± 2		51	9	1424	23
Jan. 13—19. 1922.....	—	30.00 ± .15	36.31 ± .18	32.43 ± .12	36 ± 1	36 ± 1	28 ± 1	364	38 ± 2	15	1630	23
March 28.—Apr. 22. 1922	—	31.20 ± .13	36.34 ± .20	33.68 ± .16	24 ± 1	40 ± 1	36 ± 1		47 ± 2	25	3805	23
July 5.—Aug. 28. 1921	Gillnet	32.77 ± .10	36.59 ± .10	35.60 ± .11	7 ± 1	35 ± 1	58 ± 1	416	75 ± 1	51	7053	21
March 11.—Apr. 21. 1922	—	31.62 ± .08	35.42 ± .14	33.07 ± .11	25 ± 1	46 ± 1	30 ± 1	341	36 ± 2	55	6996	22
	Locality: Langelandsbelt											
July 8.—Aug. 24. 1922.	Skovlvaad	32.76 ± .14	36.89 ± .18	35.96 ± .17	7 ± 1	36 ± 2	57 ± 2	436	77 ± 1	19	2805	23
June 16.—Aug. 31. 1922	Gillnet	32.61 ± .16	36.31 ± .18	35.22 ± .18	9 ± 1	42 ± 2	50 ± 2	407	70 ± 2	31	4688	21
	Locality: Ristingebugt											
July 4.—9. 1922.....	Skovlvaad	28.21	29.54	28.88	72	27	1	224	49	3	396	15
June 12.—Aug. 20. 1922	Gillnet	31.53 ± .25	35.58 ± .30	34.51 ± .32	17 ± 2	40 ± 2	44 ± 3	407	73 ± 2	16	1817	17

To illustrate the conditions we have in Table 1 divided the material into smaller groups of consecutive samples between which such sudden changes may be noticed. The standard deviations given in Table 1 are all empirical, that is, calculated from the empirical St. D. of means for samples. We thus notice a very marked change about the end of August and another less pronounced about the 13th of January. In neither of these two cases is it possible to explain the change by altered fishing-ground, so that it must be accounted for by migrations.

The proportional numbers of males and females in a sample also appear rather constant for long periods of time. We find for instance for the samples taken with Skovlvaad June 5.—Aug. 4., that the mean value of the percentage of females calculated from the percentage of single samples is 0.695 and the St. D. between the percentages 0.059, while theoretically the St. D. of a single determination should be expected to be 0.039, from which it may be seen than the percentage is not varying much during the period of measurement. It follows from this that the St. D.'s of Table 1 are fairly well suited for testing the deviation between means found for the different periods of measurements.

It will be seen from Table 1 that in summer the great majority of market plaice are females. This applies to the catches from Langelandsbelt as well as to those taken south and south-west of Langeland. For the latter area a seasonal variation of the relative frequency of females can partly be followed. The smallest percentage of females observed in any sample taken in June—August 1921 was 58. The average percentage of females was for the Skovlvaad samples 70 ± 1 and for the gillnet samples 75 ± 1. At the beginning of January 1922 the average percentage of females has fallen to 61 and for none of the nine samples taken between 3. and 13. of January is the percentage above 64. After this the relative frequency of females declines still further and in the beginning of April amounts on an average to only 47 % of the total Skovlvaad samples. For gillnet samples taken in March the average percentage is 29 ± 2 and percentages under 20 occur for several samples, but later in the spring the relative frequency of females again increases somewhat the average percentage for gillnet samples in April being 44 ± 3. We may summarize as follows: The number of females during the months June to August amount on an average to about 70 % of the total number of plaice in the market samples. In January their relative frequency has fallen to 50—60 % and for March, in which month it reaches a minimum the females form 30 % of the total number of fish, but after that

Table 2. Length of Plaice taken south and south-west of Langeland 1921 and 1922.

Fishing-gear	Skovlvaad						Gillnet						Skovlvaad						Gillnet					
Date of Capture	June 5.—August 31. 1921						July 5.—August 28. 1921						Jan. 3.—April 22. 1922						March 11.—April 21. 1922					
Sex	♂		♀		♂+♀		♂		♀		♂+♀		♂		♀		♂+♀		♂		♀		♂+♀	
	Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency	
	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000
Length cm																								
22	2	10	..	..	2	3	..	..	..	..	..	..	4	11	..	..	4	6	..	..	..	..	..	..
23	5	24	3	7	8	12	..	..	..	..	..	..	10	27	1	3	11	16	3	7	..	..	3	4
24	11	52	6	13	17	26	1	5	1	2	2	3	26	71	7	22	33	48	4	9	1	4	5	7
25	33	157	17	37	50	75	14	75	6	12	20	28	71	193	4	13	75	109	56	125	5	20	61	87
26	102	486	43	95	145	218	27	145	13	25	40	57	263	714	24	76	287	418	187	418	22	87	209	299
27	92	439	65	143	157	236	52	280	20	38	72	102	333	904	42	132	375	547	306	684	45	178	351	502
28	128	610	97	214	225	339	86	463	44	85	130	184	367	996	79	249	446	650	420	939	87	345	507	725
29	182	868	133	293	315	474	134	721	77	148	211	299	420	1140	105	331	525	765	465	1040	118	467	583	833
30	221	1054	179	394	400	602	159	856	91	175	250	354	458	1243	101	318	559	815	510	1141	127	503	637	911
31	249	1187	207	456	456	687	203	1093	180	346	383	543	415	1126	151	476	566	825	521	1165	152	602	673	962
32	282	1345	283	623	565	851	313	1685	234	450	547	776	359	974	173	545	532	776	513	1147	185	733	698	998
33	291	1388	357	786	648	976	288	1550	392	755	680	964	318	863	179	564	497	725	395	883	210	832	605	865
34	205	978	431	949	636	958	241	1297	462	889	703	997	201	545	230	725	431	628	409	915	184	729	593	848
35	135	644	506	1114	641	965	169	910	575	1107	744	1055	181	491	225	709	406	592	284	635	205	812	489	699
36	93	443	539	1186	632	952	97	522	663	1276	760	1078	124	336	281	885	405	590	214	479	220	871	434	620
37	37	176	528	1162	565	851	42	226	661	1272	703	997	54	147	275	866	329	480	113	253	186	737	299	427
38	14	67	438	964	452	681	21	113	668	1286	689	977	43	117	272	857	315	459	41	92	201	796	242	346
39	7	33	317	698	324	488	7	38	458	882	465	659	23	62	287	904	310	452	24	54	178	705	202	289
40	4	19	184	405	188	283	2	11	275	529	277	393	7	19	229	721	236	344	4	9	123	487	127	182
41	2	10	103	227	105	158	2	11	187	360	189	268	6	16	163	514	169	246	..	..	105	416	105	150
42	1	5	54	119	55	83	..	..	95	183	95	135	2	5	115	362	117	171	1	2	76	301	77	110
43	..	..	26	57	26	39	..	..	54	104	54	77	..	..	85	268	85	124	..	..	41	162	41	59
44	..	..	14	31	14	21	..	..	20	38	20	28	..	..	49	154	49	71	..	..	29	115	29	41
45	..	..	9	20	9	14	..	..	5	10	5	7	..	..	45	142	45	66	..	..	9	36	9	13
46	1	5	1	2	2	3	..	..	8	15	8	11	..	..	27	85	27	39	..	..	6	24	6	9
47	..	..	1	2	1	2	..	..	2	4	2	3	..	..	11	35	11	16	1	2	6	24	7	10
48	..	..	..	..	..	..	..	..	3	6	3	4	..	..	4	13	4	6	..	..	2	8	2	3
49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	9	3	4	..	..	1	4	1	1
50	..	..	1	2	1	2	..	..	..	..	..	..	..	..	3	9	3	4	..	..	..	..	..	..
51	..	..	..	..	..	..	..	..	1	2	1	1	..	..	1	3	1	1	..	..	..	..	..	..
52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	1	1	..	..	..	..	..	..
53	..	..	1	2	1	2	..	..	..	..	..	..	..	..	2	6	2	3	..	..	..	..	..	..
54	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	4	1	1
Total	2097	..	4543	..	6640	..	1858	..	5195	..	7053	..	3685	..	3174	..	6859	..	4471	..	2525	..	6996	..
♂	..	..	..	..	..	3158	..	..	..	..	..	2634	..	..	..	..	..	5373	..	..	..	..	..	6391
♀	..	..	..	..	..	6842	..	..	..	..	..	7366	..	..	..	..	..	4627	..	..	..	..	..	3609
Average Length [1]	31.36	..	35.04	..	33.88	..	32.16	..	36.07	..	35.04	..	30.49	..	36.21	..	33.14	..	31.16	..	35.09	..	32.58	..

[1]) Not corrected by 0,5 cm.

Table 3. Length of Plaice taken in Langelandsbelt and Ristingebugt 1922.

Locality	Langelandsbelt												Ristingebugt											
Fishing-gear	Skovlvaad						Gillnet						Skovlvaad						Gillnet					
Date of Capture	July 27.—August 24						June 16.—August 31.						July 4.—9.						June 6.—August 20.					
Sex	♂		♀		♂+♀		♂		♀		♂+♀		♂		♀		♂+♀		♂		♀		♂+♀	
	Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency		Frequency	
	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000	obs.	per 10,000
Length cm																								
24	..	..	1	5	1	4	1	7	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..
25	2	31	1	5	3	11	14	99	5	15	19	41	13	677	17	833	30	758	8	163	3	23	11	61
26	12	189	7	32	19	68	19	134	11	34	30	64	40	2083	26	1275	66	1667	23	468	7	53	30	165
27	13	205	16	74	29	103	46	326	20	61	66	141	49	2552	22	1078	71	1793	34	692	22	166	56	308
28	31	488	27	124	58	207	52	368	39	119	91	194	37	1927	21	1029	58	1465	36	733	40	302	76	418
29	43	677	32	147	75	267	122	863	73	223	195	416	20	1042	32	1569	52	1313	49	988	42	317	91	501
30	65	1024	62	286	127	453	153	1083	106	324	259	552	17	885	23	1127	40	1010	64	1303	63	475	127	699
31	76	1197	76	350	152	542	163	1154	156	476	319	680	7	365	20	980	27	682	46	937	56	422	102	561
32	98	1543	119	548	217	774	227	1607	240	733	467	996	6	312	23	1127	29	732	69	1405	85	641	154	848
33	82	1291	165	760	247	881	209	1479	303	925	512	1092	2	104	8	392	10	253	53	1079	97	732	150	826
34	79	1244	184	848	263	938	146	1033	281	858	427	911	..	..	6	294	6	152	42	855	97	732	139	765
35	57	898	180	829	237	845	119	842	341	1041	460	981	1	52	3	147	4	101	20	407	121	913	141	776
36	41	646	223	1028	264	941	71	502	314	959	385	821	..	..	2	98	2	51	21	428	104	784	125	688
37	20	315	220	1014	240	856	39	276	325	992	364	776	..	..	..	..	..	..	11	224	105	792	116	638
38	7	110	206	949	213	759	21	149	234	715	255	544	..	..	..	..	..	..	7	143	103	777	110	605
39	8	126	174	802	182	649	6	42	265	809	271	578	..	..	..	..	..	..	7	143	107	807	114	627
40	..	..	146	673	146	520	2	14	177	540	179	382	..	..	..	..	..	..	1	20	81	611	82	451
41	..	..	143	659	143	510	2	14	158	482	160	341	..	..	..	..	..	..	..	..	73	551	73	402
42	..	..	67	309	67	239	1	7	87	266	88	188	..	..	1	49	1	25	..	..	47	354	47	259
43	..	..	47	217	47	168	..	..	56	171	56	119	..	..	..	..	..	..	..	..	30	226	30	165
44	1	16	31	143	32	114	..	..	37	113	37	79	..	..	..	..	..	..	..	..	15	113	15	83
45	..	..	11	51	11	39	..	..	28	85	28	60	..	..	..	..	..	..	..	..	9	68	9	50
46	..	..	14	65	14	50	..	..	12	37	12	26	..	..	..	..	..	..	..	..	12	90	12	66
47	..	..	6	28	6	21	..	..	4	12	4	9	..	..	..	..	..	..	..	..	4	30	4	22
48	..	..	5	23	5	18	..	..	2	6	2	4	..	..	..	..	..	..	..	..	2	15	2	11
49	..	..	4	18	4	14	..	..	1	3	1	2	..	..	..	..	..	..	..	..	1	8	1	6
50	..	..	1	5	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
51	..	..	1	5	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
52	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
53	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
54	..	..	1	5	1	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	635	..	2170	..	2805	..	1413	..	3275	..	4688	..	192	..	204	..	396	..	491	..	1326	..	1817	..
♂	..	..	..	..	..	2264	..	..	..	..	..	3014	..	..	..	..	..	4848	..	..	..	..	..	2702
♀	..	..	..	..	..	7736	..	..	..	..	..	6986	..	..	..	..	..	5152	..	..	..	..	..	7298
Average Length[1]	32.28	..	36.44	..	35.49	..	32.04	..	35.81	..	34.68	..	27.73	..	29.14	..	28.45	..	31.20	..	35.77	..	34.53	..

[1]) Not corrected by 0,5 cm.

Table 4. Distribution of 1000 kilograms of Plaice according to Sex and Length of Plaice.

Locality	South and south-west of Langeland (I)												Langelandsbelt (II)						Ristingebugt (III)					
Fishing-gear	Skovlvaad			Gillnet			Skovlvaad			Gillnet			Skovlvaad			Gillnet			Skovlvaad			Gillnet		
Date of Capture	5. June—31. Aug. 1921			5. July—28. Aug. 1921			3. Jan.—22. Apr. 1922			11. March—21. Apr. 1922			27. July—24. Aug. 1922			16. June—31. Aug. 1922			4.—9. July 1922			6. June—20. Aug. 1922		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg	kg
23	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	1	..	1	..	..	..	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	2	..	3	1	..	1	4	..	4	4	..	4	..	..	..	1	..	2	22	28	51	2	1	2
26	7	3	10	2	1	2	18	2	19	13	2	15	2	1	3	2	1	3	75	49	125	5	2	7
27	7	5	12	3	1	5	25	3	28	24	4	28	2	2	4	5	2	6	103	47	150	9	6	14
28	11	8	19	6	3	9	31	7	37	37	8	44	5	5	10	6	4	10	86	50	136	10	11	21
29	17	12	29	11	6	17	39	10	49	45	11	57	8	6	14	15	9	24	52	83	136	15	13	28
30	22	18	41	14	8	22	47	10	57	55	14	68	14	13	27	21	14	35	49	66	116	22	22	44
31	28	23	51	19	17	37	47	17	64	62	18	79	18	18	35	24	23	47	22	64	86	18	21	39
32	35	35	69	33	25	58	44	21	66	67	24	91	25	30	55	37	39	76	21	80	100	29	36	64
33	39	48	87	33	45	78	43	24	67	56	30	86	23	46	68	37	54	91	8	30	39	24	44	69
34	30	63	93	30	58	89	30	34	64	63	29	92	24	56	80	28	55	83	..	25	25	21	49	70
35	22	81	102	23	79	102	29	36	65	48	35	83	19	59	78	25	72	97	4	13	18	11	66	77
36	16	94	110	14	99	113	22	49	71	39	40	80	15	80	94	16	72	88	..	10	10	12	61	74
37	7	99	106	7	107	114	10	52	63	23	37	60	8	85	93	10	81	91	..	..	..	7	67	74
38	3	89	92	4	117	121	9	56	65	9	43	52	3	87	89	6	63	69	..	..	..	5	72	76
39	2	70	71	1	87	88	5	64	69	6	41	47	4	79	82	2	77	79	..	..	..	5	80	85
40	1	44	45	..	56	56	2	55	57	1	31	32	..	71	71	1	55	56	..	..	..	1	66	66
41	1	26	27	..	41	41	2	42	44	..	28	28	..	75	75	1	53	54	..	..	..	..	64	64
42	..	15	15	..	22	22	1	32	32	..	22	22	..	38	38	..	32	32	..	8	8	..	44	44
43	..	8	8	..	14	14	..	25	25	..	13	13	..	28	28	..	22	22	..	..	..	..	30	30
44	..	4	4	..	5	5	..	16	16	..	10	10	1	20	21	..	15	15	..	..	..	..	16	16
45	..	3	3	..	1	1	..	15	15	..	3	3	..	8	8	..	12	12	..	..	..	..	10	10
46	..	..	1	..	2	2	..	10	10	..	2	2	..	10	10	..	6	6	..	..	..	..	15	15
47	..	..	..	..	1	1	..	4	4	..	2	3	..	5	5	..	2	2	..	..	..	..	5	5
48	..	..	..	..	1	1	..	2	2	..	1	1	..	4	4	..	1	1	..	..	..	..	3	3
49	..	..	..	..	..	..	..	1	1	..	..	..	..	4	4	..	1	1	..	..	..	..	1	1
50	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
51	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
52	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
53	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
54	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..	..	..	..
Total	249	751	..	202	798	..	408	592	..	551	449	..	168	832	..	235	765	..	443	554	..	196	804	..

the percentage increases and amounts to about 40 % for April. It will be seen that the relative frequencies of males and females vary so widely according to the season that it is necessary to be cautious in drawing conclusions about an altered distribution of the frequencies of the two sexes on the basis of a few samples taken from different seasons and from different localities.

From Table 1 it is noticeable for the area south and south-west of Langeland that in the gillnet samples as well as in the Skovlvaad samples, the average length of the males is greater in the summer than in the early spring, and this also holds for the females of the gillnet samples. In the Skovlvaad samples the average length of the females is however essentially the same in the summer as in the early spring and in January. More deciding for the seasonal variation of the average length than these differences is however the seasonal variation of the relative frequencies of the sexes. The average length of the females of the market plaice is 4—6 cm larger than the average length of the males, from which it follows that even for the Skovlvaad samples the average length of the total sample is more than 1 cm larger in the summer, when the females are most numerous, than in spring when the two sexes in these samples occur with about the same frequency. For the gillnet samples the difference between the average lengths in summer and in spring amounts even to 2.5 cm approximately.

The average lengths found for Langelandsbelt in the summer 1922 are essentially the same as those found in the summer 1921 for the area south and south-west of Langeland, or perhaps somewhat greater. The means for the gillnet samples from the Ristingebugt are somewhat smaller. Among all the samples the Skovlvaad samples from August 28.—31. 1921 and from July 4.—9. 1922 are exceptional for their small average lengths. Most striking are the average lengths of the females, being only 32.1 and 29.5 respectively. Among all the other samples of females measured only one occurs with a mean as small as 32.9 and only 6 for which the means are under 34 cm. The three samples from July 4.—9. are taken only 2 miles of land in Ristingebugt from a depth of only 15 m. The 6 samples from Aug. 28.—31. have however arisen from the same locality as the gillnet samples taken at the same season, so that it must be concluded that a rather sudden immigration of young fish has taken place.

The average weight of plaice by the calculation of which the "coefficient of nourishment" is put equal to 0.900, shows that the weight per score is in June—August about 8 kilograms and in the early spring about 7 kilograms.

Tables 2—4 give, for longer periods of time, the distribution of 10,000 plaice and 1000 kilograms of plaice respectively among the various lengths and among the two sexes. From Table 4 it will be seen that the males in summer only comprise about 20 % of the total weight of the market plaice, and that in the season, when the males are most numerous and their number amounts to 64 % of the total number in the gillnet samples, the weight of the males is only 55 % of the total weight.

III. Comparison between the Lengths of Market Plaice in 1921—1922 and in 1910—1911.

The measurements were carried out during the period 1910—1911[1] under the same circumstances as in 1921—1922. At the first period of measurement no determination of the sex of the plaice was undertaken, so that the comparison is limited to the total samples. Table 5 gives a summary of such values from Table 1 for which comparable values from the former period of measurement are available. The values for 1910—1911 deviate very conspicuously from the new values and show that the plaice are now on an average much larger than formerly.

[1] A. C. Johansen l. c. Tables 44—48.

Table 5. Comparison between Length of Plaice in 1910—1911 and in 1921—1922.

Locality of Fishing-place	Period of Measurement	Fishing-gear	Average Length of Plaice	Percentage of Individuals smaller than 30 cm	Percentage of Individuals between 30 cm and 35 cm	Percentage of Individuals greater than 35 cm	Average Weight in gr	Number of Samples	Number of Individuals	Average Depth of Fishing place in me
South-west of Langeland..	Jan.—Febr. 1911	Gillnet	29.35 ± .08	65.4 ± 1.1	30.2 ± 1.0	4.4 ± .5	235	75	21001	18
— — ..	July—Aug. 1911	Skovlvaad	26.90 ± .05	93.1 ± 0.4	6.1 ± .4	0,8 ± .1	199	31	6876	10
South and South-west of Langeland	June—Aug. 1921	—	34.94 ± .12	9.4 ± .6	39.7 ± 1.1	50.9 ± 1.5	396	41	5606	22
South and South-west of Langeland	Jan.—Apr. 1922	—	33.50 ± .15	26.5 ± 1.1	37.8 ± .8	35.7 ± 1.1	364	49	6859	23
South and South-west of Langeland	July—Aug. 1921	Gillnet	35.60 ± .11	6.6 ± .5	35.4 ± 1.1	58.0 ± 1.4	416	51	7053	21
South and South-west of Langeland	March—Apr. 1922	—	33.07 ± .11	24.7 ± .9	45.7 ± .9	29.6 ± 1.2	341	55	6996	22
Ristingebugt	June—Aug. 1922	—	34.51 ± .32	16.6 ± 2.2	40.3 ± 1.8	43.6 ± 3.3	407	16	1817	17
Langelandsbelt	May—July 1910 and 1911	Skovlvaad and Gillnet	30.74 ± .17	48.1 ± 1.6	38.0 ± .8	13.9 ± 1.4	276	28	3731	16
—	June—Aug. 1922	—	35.50 ± .14	7.8 ± .6	39.8 ± 1.2	52.4 ± 1.6	418	50	7493	22

Looking first at the measurements from Jan.—Febr. 1911, which may best be compared with the Skovlvaad samples from Jan.—April 1922 and the gillnet samples from March—April 1922, we notice, that the average length was in 1911 more than $3^1/_2$ cm smaller, the percentage of plaice under 30 cm about 40 larger, and the percentage of plaice over 35 cm about 25 smaller than in 1922, and that the average weight per score was more than 2 kilograms less than now.

It might seem a weak point in the comparison that the catches in 1911 have arisen from shallower water of average depth 18 m while in 1922 the average depth of the fishing-places is 22—23 cm. We shall therefore compare the samples from the deepest places in 1911 with those from the shallowest places in 1922. We find the average values given in the following table, both of them being concerned with gillnet samples only.

Period of Measurement	Average Length	Average Depth of Fishing-place. m.	Number of samples
January—February 1911 .	29.08	19	43
March—April 1922	33.26	20	20

It appears to follow from these results that a difference of a couple of meters in the average depth of the fishing-places is not of essential significance for the corresponding average lengths of plaice found, since we find that for the same period of measurement the samples from the deeper places have rather a larger than a smaller average length than those from the shallower places.

For Langelandsbelt we gather from Table 5, that the average length in 1910—1911 was about 5 cm smaller, the percentage of plaice under 30 cm about 40 larger, the percentage of plaice over 35 cm about 40 smaller, and the weight per score nearly 3 kilograms smaller than in the summer 1922. For this locality also the average depth of the fishing-places is greater now than formerly. A comparison of the samples from the greatest depths in 1910—1911 with those from the smallest depths in 1922 gives the following results:

Period of Measurement	Average Length	Average Depth of Fishing-place. m.	Number of samples
May—July 1910 and 1911.	30.5	18.5	11
June—July 1922	35.3	19.3	8

Neither in this case has the deviation between the average lengths decreased, after we have selected groups of samples arising from fishing-places the average depths of which deviate less from each other than those of Table 5. We may therefore assume that a similar deviation between the average lengths would be found if we could compare fish taken in 1910—1911 and 1922 from exactly the same localities.

The Skovlvaad samples from July—Aug. 1911 are from catches taken in such shallow water that we have not for the latter period of measurement any material from approximately the same locality. The above results seem however to indicate that too much stress need not be laid on a difference of some meters in the average depths of the fishing-places. It therefore seems permissible to compare the Skovl-

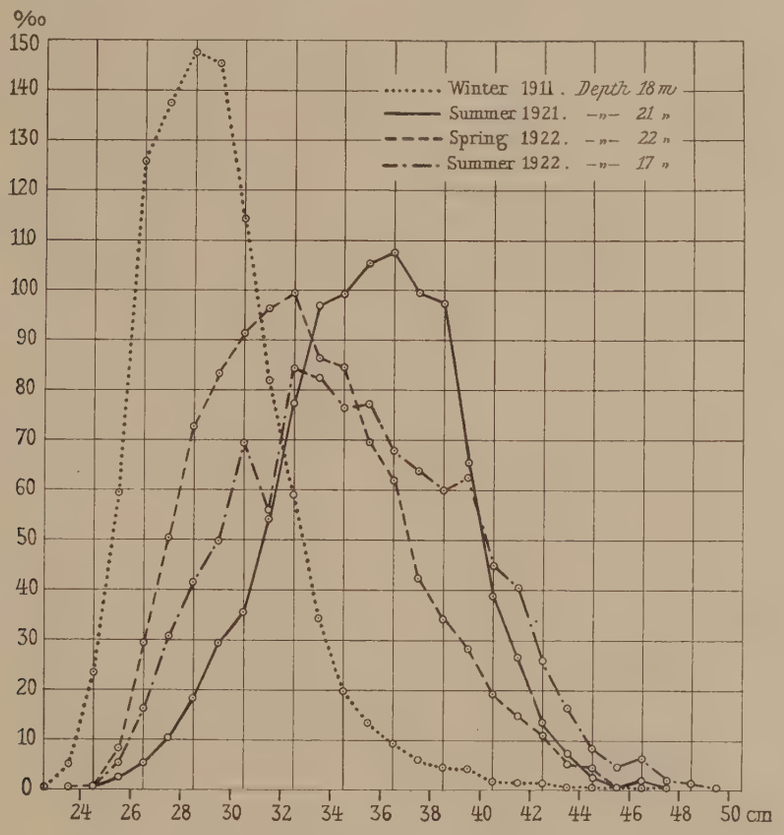

Fig. 2. Plaice taken in Gillnet south and south-west of Langeland.
Frequencies of Length per 1000 of Plaice.

vaad samples from July—Aug. 1911, arising from the average depth of 10 m, with the gillnet samples from June—Aug. 1922, arising from the average depth of 17 m, and conclude that even if a part of the difference between the average length of the plaice in the two groups of samples may perhaps be accounted for by the different locality, a considerable difference will still remain which can only be explained by assuming that the average length of the plaice has increased very much from 1911 to 1922.

The chief results may be summarized as follows:

The average length of the market plaice has from 1910—1911 to 1921—1922 increased by at least 3½ cm. Plaice greater than 35 cm amount now in summer to nearly half the total of all plaice in the landings, while their number formerly amounted to 14 % at

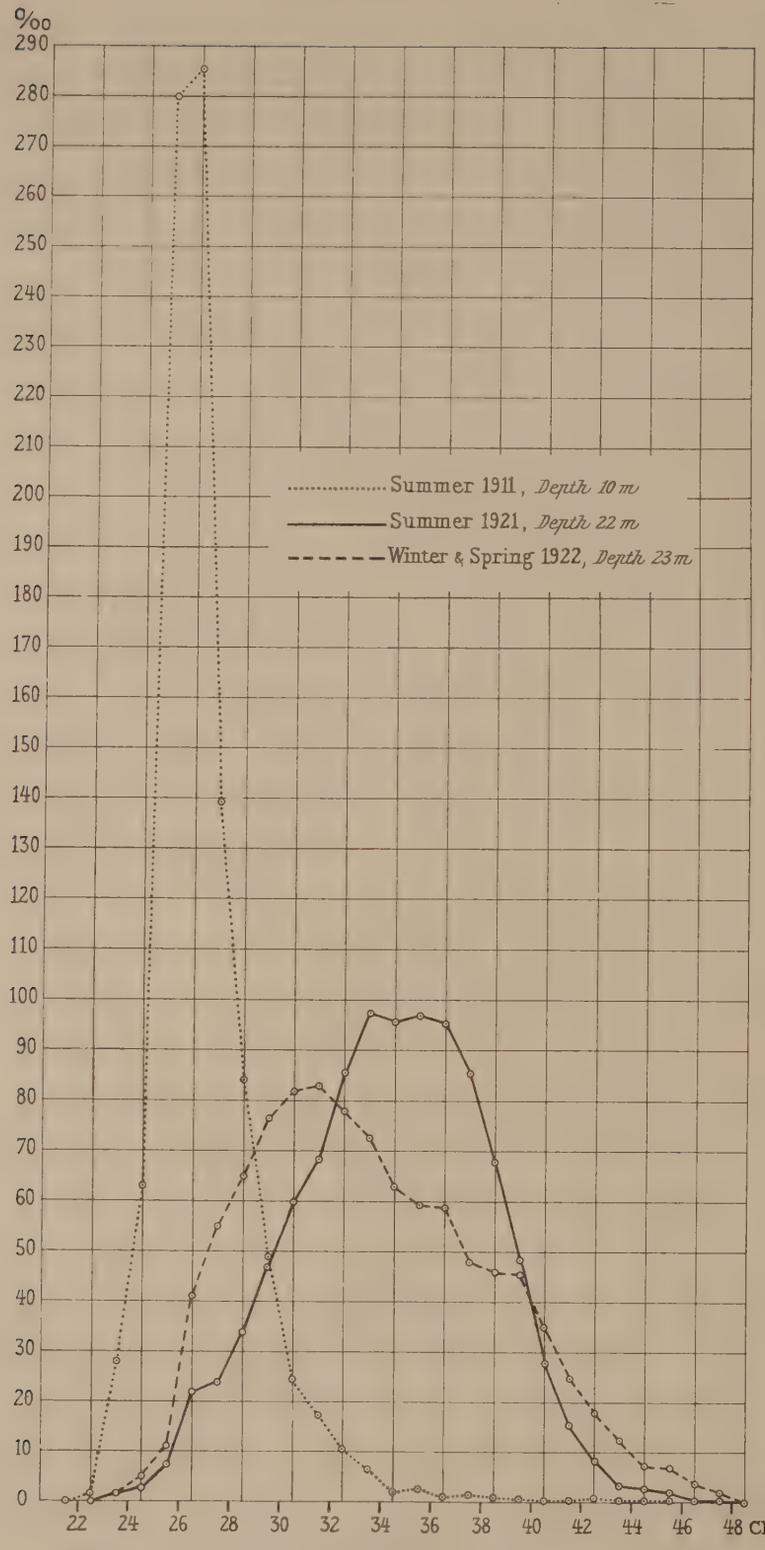

Fig. 3. Plaice taken in Skovlvaad south and south-west of Langeland. Frequencies of Length per 1000 of Plaice.

the most. The average weight per score has increased from 4—5½ kilograms to 7—8 kilograms.

In Fig. 2—4 the three groups of measurements from 1910—1911 here mentioned are compared with the new measurements best suited for comparison. The figures give the distributions of frequencies among the various lengths for 1000 plaice (see Tables 2—3). In each of the three figures the curve for 1910—1911 is distinguished from the curves from 1921—1922 by the position of the maximum frequency, which falls at a much smaller length in 1910—1911 than in 1921—1922.

Also the maximum length observed has increased. In 1921—1922 we find among the 37,254 plaice measured 33 individuals of 47 cm and 38 of 48—54 cm, while among the 31,906 plaice measured in 1910—1911 none exceeds 47 cm and only 5 have that length.

It is possible that the relative frequencies of males and females have altered in the course of years, so that the females are now more frequent in the catches than formerly. We shall return to this question in a following chapter and at this point only examine, whether an alteration of the relative frequencies of the two sexes would alone suffice to explain the difference found between the average length of plaice in 1910—1911 and in 1921—1922. In Table 6 the average length of the total samples from 1910—1911 are compared with the average lengths of the males in 1922.

It will be seen that the average lengths of the males in 1922 are essentially greater than the average lengths of males and females in 1910—1911.

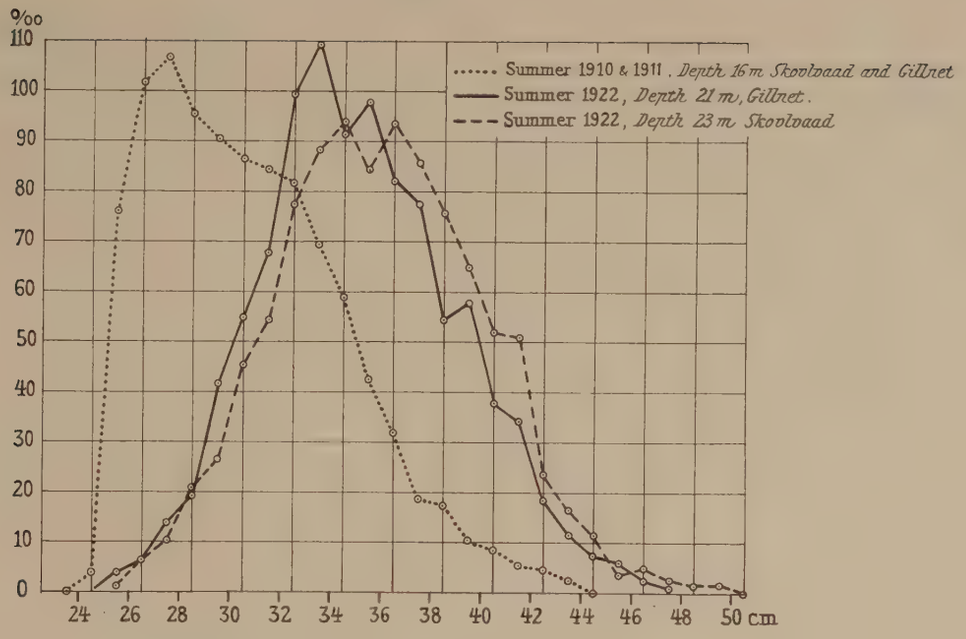

Fig. 4. Plaice taken in Skovlvaad and Gillnet in Langelandsbelt.
Frequencies of Length per 1000 of Plaice.

Table 6. Comparison of Total Samples from 1910—1911 with Samples of Males from 1922.

Locality of Fishing-place	Period of Measurement	Fishing-gear	Sex	Average Length	Number of samples
South-west of Langeland.....	Jan.—Febr. 1911	Gillnet	♂+♀	29.35 ± .08	75
South and south-west of Langeland	March—Apr. 1922	—	♂	31.62 ± .08	55
Langelandsbelt.....	May—July 1910 and 1911	Skovlvaad and Gillnet	♂+♀	30.74 ± .17	28
—	June—Aug. 1922	—	♂	32.67 ± .11	50
South-west of Langeland.....	July—Aug. 1911	Skovlvaad	♂+♀	26.90 ± .05	31
Ristingebugt.....	June—Aug. 1922	Gillnet	♂	31.53 ± .25	16

IV. Age of Plaice in the Belt Sea.

Age determinations by means of otoliths were undertaken for five samples of market plaice from the Belt Sea in 1921—1922. Two samples come from the Bagenkop area, where the measurements of length were undertaken, two from the waters between Lolland and Fehmern, and one from Smaalandsbugt.

These samples, like the majority of the plaice measured in Bagenkop, contain scarcely any individuals below 25 cm of length. None of the younger age-groups, say until the VII-group, are therefore fully represented and so the average lengths given in the tables do not represent the average length of unsorted age-groups. Still the mean values are useful for comparison amongst the five samples. They show that the growth is most rapid for the Bagenkop samples and slowest for the sample from Fehmernbelt (Table 10). For comparison with unsorted samples previously taken with ottertrawl these average lengths for the younger age-groups cannot be used. But the VII-group

Table 7. Length and Age of Plaice caught south of Lol-
(State of ma-

Sex	♂									♀										
Age-group	III	IV	V	VII	V+	VI+	VIII+	?	Total	II	III	IV	V	VI	VII	XX	XXIV	VI+	VII+	VIII+	XX+
Length cm																					
25	4	2	..	..	..	..	..	..	6	..	1	..	..	..	..	..	..	..	..	..	..
26	3	1	..	1	..	..	..	..	5	2	5	..	..	..	..	..	..	..	..	..	..
27	1	..	..	1	..	1	..	..	3	..	1	..	1	..	..	..	..	..	..	..	..
28	3	..	..	..	..	..	..	..	3	..	2	..	2	..	..	..	..	..	..	..	..
29	1	..	3	..	..	..	..	..	4	..	4	3	1	..	..	..	..	..	..	..	..
30	3	..	..	..	..	..	..	..	3	..	14	2	2	1	..	..	..	..	..	..	..
31	..	1	1	..	..	..	..	1	3	..	5	1	1	..	..	..	..	..	..	..	..
32	1	2	..	..	..	..	..	..	3	..	7	5	2	1	..	..	..	..	..	..	..
33	..	..	..	..	..	..	..	..	..	..	3	..	2	1	..	..	..	..	..	..	..
34	..	..	..	..	..	..	..	..	..	..	..	5	2	..	1	..	..	2	..	1	..
35	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	..	..	..	..	..	..
36	..	..	..	..	..	..	..	..	..	..	..	1	4	..	..	..	1	1	..	..	..
37	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
38	..	..	..	..	..	..	..	..	..	..	..	..	3	2	..	..	..	..	1	1	..
39	..	..	..	..	1	..	1	..	2	..	..	2	..	..	..	1	..	1	..	..	..
40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1
42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
43	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total	16	6	4	2	1	1	1	1	32	2	42	20	22	6	5	1	1	4	2	2	2
Aver. Length[1])	27.5	28.5	29.5	26.5	39.0	27.0	39.0	31.0	28.7	26.0	29.8	32.9	33.2	34.3	38.0	39.0	36.0	35.8	40.0	36.0	43.0

[1]) Not corrected by 0.5.

Table 8. Length and Age of Plaice caught 7 miles

Sex	♂										♀							
Age-group	II		III	IV	V	VI	VII+	VIII+	Total		II	III	IV		V		VI	
Maturity	imm.	m.	m.	m.	m.	m.	m.	m.	imm.	m.	imm.	imm.	m.	imm.	m.	imm.	m.	m.
Length cm																		
26	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
27	1	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..
28	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..
29	1	1	2	..	1	..	..	..	1	4	..	..	..	..	..	..	..	..
30	..	1	4	1	..	1	..	..	..	7	2	1	1	1	..	1	..	..
31	..	..	1	..	2	1	..	..	..	4	..	..	1	..	..	..	..	..
32	..	..	1	1	..	..	..	..	..	2	..	..	1	..	1	..	..	1
33	..	..	..	2	1	..	..	1	..	4	..	..	1	..	..	..	..	..
34	..	..	1	..	..	..	1	..	..	2	..	..	..	..	..	..	1	..
35	..	..	..	..	3	..	..	..	..	3	..	..	1	..	..	..	2	..
36	..	..	..	1	..	..	..	..	..	1	..	..	1	..	1	..	1	1
37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..
40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
42	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
43	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
44	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	3	3	9	5	7	2	1	1	3	28	2	2	6	1	4	2	4	2
Aver. Length cm[1])	27.3	28.7	30.6	32.8	32.7	30.5	34.0	33.0	27.3	31.5	30.0	29.0	32.8	30.0	36.5	29.0	35.0	34.0

[1]) Not corrected by 0.5.

nd between Sønderskov and Kramnitze. 21. May 1921.
rity unknown).

				♂+♀																Sex
XXI+	XXIV+	?	Total	II	III	IV	V	VI	VII	XX	XXIV	V+	VI+	VII+	VIII+	XX+	XXI+	XXIV+	?	Total	Age-group
																					Length cm
..	..	..	1	..	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	7	25
..	..	2	9	2	8	1	..	..	1	..	..	..	..	..	..	..	..	..	2	14	26
..	..	..	2	..	2	..	1	..	1	..	..	..	1	..	..	..	..	..	..	5	27
..	..	..	4	..	5	..	2	..	..	..	..	..	..	..	..	..	..	..	..	7	28
..	..	..	8	..	5	3	4	..	..	..	..	..	..	..	..	..	..	..	..	12	29
..	..	..	19	..	17	2	2	1	..	..	..	..	..	..	..	..	..	..	..	22	30
..	..	..	7	..	5	2	2	..	..	..	..	..	..	..	..	..	..	..	1	10	31
..	..	..	15	..	8	7	2	1	..	..	..	..	..	..	..	..	..	..	..	18	32
..	..	..	6	..	3	..	2	1	..	..	..	..	..	..	..	..	..	..	..	6	33
..	..	..	11	..	..	5	2	..	1	..	..	..	2	..	1	..	..	..	..	11	34
..	..	..	4	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	4	35
..	..	..	7	..	..	1	4	..	..	..	1	..	1	..	..	..	..	..	..	7	36
..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	37
..	..	..	7	..	..	..	3	2	..	..	..	..	..	1	1	..	..	..	..	7	38
..	..	..	4	..	..	2	..	..	..	1	..	1	1	..	1	..	..	..	..	6	39
..	..	..	2	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2	40
..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	2	41
..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	42
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43
1	1	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	44
..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	45
1	1	2	113	2	58	26	26	6	7	1	1	1	5	2	3	2	1	1	3	145	Total
44.0	44.0	26.0	32.60	26.0	29.17	31.9	32.7	34.3	34.7	39.0	36.0	39.0	34.0	40.0	37.0	43.0	44.0	44.0	27.7	31.74	Aver. L.[1])

VSW of Bagenkop. 14. Sept. 1921. Depth: 18 m.

							♂+♀												Sex
VII	VIII	VIII+	X+	XII+	Total		II	III	IV	V	VI	VII	VII+	VIII or IX	VIII+	X+	XII+	Total	Age-group
m.	m.	m.	m.	m.	imm.	m.	imm. +m.	imm. +m.	imm. +m.	imm. +m.	m.	m	m.	m.	m.	m.	m.	imm. +m.	Maturity
																			Length cm
..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	26
..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	2	27
..	..	..	..	..	2	..	..	1	..	1	..	..	..	..	..	..	..	..	2	28
..	..	..	..	..	..	..	2	2	..	1	..	..	..	..	..	..	..	..	5	29
..	..	..	..	..	5	1	3	6	2	1	1	..	..	..	..	..	..	..	13	30
..	..	..	..	..	..	1	..	2	..	2	1	..	..	..	..	..	..	..	5	31
..	..	..	..	1	..	4	..	2	2	..	1	..	..	..	..	..	..	1	6	32
..	..	..	..	..	..	1	..	1	2	1	..	..	..	..	1	..	..	..	5	33
..	..	..	..	..	..	1	..	1	..	1	..	..	..	1	..	..	..	..	3	34
..	..	..	..	..	..	3	..	1	..	5	..	..	..	..	..	..	..	..	6	35
..	..	..	..	..	..	4	..	1	2	1	1	..	..	..	..	..	..	..	5	36
..	1	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	1	37
1	..	..	..	2	..	3	..	..	..	..	..	1	..	..	..	..	..	2	3	38
..	..	1	..	..	..	3	..	..	2	..	..	..	..	..	..	1	..	..	3	39
..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	40
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	42
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	43
..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	44
1	1	1	1	4	7	24	8	17	10	13	4	1	1	1	2	1	4	62	Total
38.0	37.0	39.0	40.0	38.0	29.4	35.7	28.3	31.2	34.0	32.8	32.3	38.0	34.0	37.0	36.0	40.0	38.0	32.7	Aver. Length [1])

Table 9. Length and Age of Plaice caught in Gillnet 6 miles
(The plaice are with two excep

Sex	♂											♀			
Age-group	I	II	III	IV	V	VI	VII	VIII+	X	?	Total	II	III	IV	V
Length cm															
26	..	3	..	1	..	1	..	..	..	..	5	..	..	..	..
27	1	6	3	..	..	..	..	..	..	..	10	..	..	..	..
28	..	2	5	2	1	..	..	..	..	..	10	..	..	..	..
29	..	4	5	..	..	1	..	..	..	1	11	..	..	..	..
30	..	2	2	1	2	1	..	..	..	1	9	..	1	..	..
31	..	1	4	2	3	..	..	..	..	..	10	..	2[1]	1[2]	1
32	..	4	3	1	..	..	..	..	..	..	8	1	..	..	1
33	..	1	1	1	5	..	..	..	..	..	8	1	..	1	1
34	..	1	3	3	..	..	..	..	1	..	8	1	1	..	..
35	..	1	2	5	1	1	1	..	..	..	11	..	..	..	1
36	..	..	1	1	2	..	..	..	..	..	4	1	..	..	..
37	..	..	1	..	..	2	1	1	..	..	5	..	..	2	1
38	..	..	..	..	..	..	..	..	..	..	..	..	1	2	1
39	..	..	..	..	..	..	1	..	..	..	1	..	3	1	1
40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
41	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
42	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Total	1	25	30	17	14	6	3	1	1	2	100	4	8[1]	9[1]	7
Average Length[3] cm	27.0	29.3	30.8	32.5	32.4	32.3	37.0	37.0	34.0	29.5	31.24	33.8	35.1	37.3	35.0

[1]) One of these immature. [2]) Immature. [3]) Not corrected by 0.5.

Table 10. Length and Age of Plaice caught S of Lolland
Fishing-gear: Skovlvaad

Sex	♂														♀				
Age-group	III		IV		V		VI	VII	VII+	VIII	IX	?	Total		III		IV		V
Maturity	imm.	m.	imm.	m.	imm.	m.	m.	m.	m.	m.	m.	m.	imm.	m.	imm.	m.	imm.	m.	imm.
Length cm																			
25	1	4	..	3	..	2	2	..	..	..	..	1	1	12	..	1	1	..	..
26	..	5	..	6	1	6	3	..	..	1	..	1	1	22	..	..	1	..	..
27	..	4[1])	1	4	..	5	3	2	..	..	..	1	1	19	3	..	1	..	..
28	1	2	2	2	..	2	2	1	1	..	1	2	3	13	4	..	1	2	..
29	..	2	..	3	..	2	3	2	..	..	..	..	..	12	1	..	..	1	1
30	..	..	..	2	..	1	1	..	1	..	..	2	..	7	1	..	..	..	..
31	..	1	..	2	..	2	..	1	1	..	..	..	..	7	..	..	..	..	..
32	..	..	..	1	..	1	..	..	..	..	..	..	..	2	..	..	1	1	..
33	..	..	..	..	..	..	..	1	1	..	..	..	..	2	..	..	..	..	..
34	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..
35	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..
36	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..
37	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
38	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
39	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
40	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
41	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	2	18[1])	3	23	1	22	14	8	5	1	1	7	6	99	9	1	5	4	1
Aver. Length[2]) cm.	26.5	26.8	27.7	27.7	26.0	27.9	27.3	29.8	31.6	26.0	28.0	27.7	27.0	27.87	28.0	25.0	27.6	29.3	29.0

[1]) Two of these possibly immature. [2]) Not corrected by 0.5.

SW of Bagenkop 22. March 1922. Depth: ca. 22 m.
ns [see foot of the table] mature.)

♀						♂ + ♀												Sex
VI	VII	VIII	IX+	?	Total	I	II	III	IV	V	VI	VII	VIII	VIII+	IX+	X	?	Total	Age-group
																			Length cm
..	..	..	..	..	..	..	3	..	1	..	1	..	..	..	..	..	..	5	26
..	..	..	..	..	..	1	6	3	..	..	..	..	..	..	..	..	..	10	27
..	..	..	..	..	..	..	2	5	2	1	..	..	..	..	..	..	..	10	28
..	..	..	..	..	..	..	4	5	..	..	1	..	..	..	..	..	1	11	29
..	..	..	..	..	1	..	2	3	1	2	1	..	..	..	..	..	1	10	30
..	..	..	..	..	4	..	1	6[1])	3[1])	4	..	..	..	..	..	..	..	14	31
..	..	..	..	..	2	..	5	3	1	1	..	..	..	..	..	..	..	10	32
..	..	..	..	..	3		2	1	2	6	..	..	..	..	..	..	..	11	33
..	3	..	..	..	5	..	2	4	3	..	..	3	..	..	..	1	..	13	34
..	1	..	..	..	2	..	1	2	5	2	1	2	..	..	..	..	..	13	35
..	..	..	1	..	2	..	1	1	1	2	..	..	..	..	1	..	..	6	36
1	..	..	..	..	4	..	..	1	2	1	3	1	..	1	..	..	..	9	37
1	..	..	..	..	5	..	..	1	2	1	1	..	..	..	..	..	..	5	38
1	..	..	..	1	7	..	..	3	1	1	1	1	..	..	..	..	1	8	39
..	1	1	..	..	2	..	..	..	..	..	..	1	1	..	..	..	..	2	40
1	..	..	..	..	2	..	..	..	1	..	1	..	..	..	..	..	..	2	41
..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	42
4	5	1	1	1	40	1	29	38	26	21	10	8	1	1	1	1	3	140	Total
38.8	35.4	40.0	36.0	39.0	36.10	27.0	29.9	31.7	34.2	33.2	34.9	36.0	40.0	37.0	36.0	34.0	32.7	32.63	Aver. Length[1])

etween Rødby Harbour and Fehmern on April 24. 1922.
Depth: 25—28 m.

♀										♂ + ♀										Sex
VI			VII	VII+	VIII	IX	?	Total		III	IV	V	VI	VII	VII+	VIII	IX	?	Total	Age-group
m.	imm.	m.	m.	m.	m.	m.	m.	imm.	m.	imm. +m.	imm. +m.	imm. +m.	imm. +m.	m.	m.	m.	m.	m.	imm. +m.	Maturity
																				Length cm
1	..	..	..	..	..	..	...	1	2	6	4	3	2	..	..	..	..	1	16	25
..	..	..	..	..	..	..	1	1	1	5	7	7	3	..	..	1	..	2	25	26
..	1	..	..	..	..	..	..	5	..	7[1])	6	5	4	2	..	..	..	1	25	27
1	..	3	3	..	..	..	..	5	9	7	7	3	5	4	1	..	1	2	30	28
2	2	1	2	..	..	1	..	4	7	3	4	5	6	4	..	..	1	..	23	29
1	..	2	..	..	1	..	..	1	4	1	2	2	3	..	1	1	..	2	12	30
..	..	3	2	..	..	..	..	..	5	1	2	2	3	3	1	..	..	..	12	31
2	..	1	..	..	..	..	..	1	7	..	3	3	4	..	..	..	..	..	10	32
..	..	1	1	..	..	..	..	..	2	..	..	..	1	2	1	..	..	..	4	33
..	..	1	..	2	2	..	..	..	5	..	..	..	1	1	2	2	..	..	6	34
..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	35
..	..	..	1	2	..	..	..	..	3	..	..	..	..	1	3	..	..	..	4	36
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	37
..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	1	..	38
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	39
..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	40
1	..	..	..	1	..	..	..	..	2	..	..	1	..	..	1	..	..	..	2	41
8	3	15	9	6	4	1	1	18	49	30[1])	35	32	32	17	11	5	2	8	172	Total
0.8	28.3	30.7	30.3	36.8	34.0	29.0	26.0	28.0	31.31	27.1	27.8	28.6	29.0	30.1	34.5	32.4	28.5	27.5	28.83	Aver. Length[2]

Table 11. Length and Age of Plaice caught in Smaalandsbugt between Vejrø and Knudshoved on June 5. 1922.
Depth: ca. 13 m.

Sex	♂								♀								♂+♀							
Age-group	II	III		IV		V	Total		II	III	IV		VI	VIII	?	Total	II	III	IV	V	VI	VIII	?	Total
State of maturity	im.	im.	m.	im.	m.	im.	im.	m.	im.	im.	im.	m.	im.	m.	im.	im.	m.	im.	im. + m.	im. + m.	im.	im.	m.	im.	im. + m.
Length in cm																									
24	..	..	..	..	1	..	..	1	..	1	..	..	..	..	..	1	..	..	1	1	..	..	..	..	2
25		6	1	3	2	..	9	3	1	4	8	..	..	..	..	13	..	1	11	13	..	..	..	..	25
26	..	11	1	6	2	..	17	3	..	23	23	..	1	..	..	47	..	..	35	31	..	1	..	..	67
27	1	11	1	6	..	..	18	1	..	12	18	..	..	..	1	31	..	1	24	24	..	..	..	1	50
28	..	5	..	4	..	1	10	..	..	4	14	1	..	..	1	19	1	..	9	19	1	..	..	1	30
29	..	1	..	2	..	..	3	..	..	1	7	..	..	1	..	8	1	..	2	9	..	..	1	..	12
30	..	..	..	2	1	..	2	1	..	2	4	..	..	..	..	6	..	..	2	7	..	..	..	..	9
31	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	..	..	1	1	..	..	..	..	2
32	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	2	..	..	2	..	..	..	..	..	2
33	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..	..	..	1
34	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	1	..	..	..	..	1
Total	1	34	3	23	6	1	59	9	1	50	76	2	1	1	2	130	3	2	87	107	1	1	1	2	201
Average Length[1]	27.0	26.5	26.0	27.1	26.0	28.0	26.8	26.0	25.0	26.8	27.16	30.5	26.0	29.0	27.5	27.02	30.0	26.0	26.69	27.14	28.0	26.0	29.0	27.5	26.95

[1] Not corrected by 0.5.

appears to be intact by sorting and so numerously represented in some of the samples from 1921—1922 (Tables 7, 9 and 10) as to make a comparison possible. We have from April 1909 a sample taken in otter-trawl near Bagenkop, but as it only contains very few females we shall add to the VII-group of this sample that from a sample taken in April 1909 in the neighbourhood of Tranekær[1], although it is obvious that the growth at the latter place is quicker than at Bagenkop. For the plaice the age of which is indicated as 7 or 7 + we find the values given in the following table.

Table 12. Average Length of 7 year old Plaice in March—May.

Sex	♂		♀	
Date of capture	Average Length ± St. D.	Number of individuals	Average Length ± St. D.	Number of individuals
April 1909	23.1 ± 0.2	107	26.8 ± 0.5	32
March—May 1921—1922	31.1 ± 0.8	21	35.8 ± 0.9	26

It will be seen that Table 12 shows an extraordinarily large difference between the average length of the seven year old plaice in 1909 and in 1921—1922. Considering that the designation '7 +' is relatively much more frequent in 1909 than in 1921—1922, and that the Tranekær sample from 1909 has a distinctly more rapid growth than the Bagenkop sample in 1909, while on the other hand the Bagenkop sample in 1921 has the quickest growth of any of the samples from 1921—1922, we must conclude, that the alteration of growth at Bagenkop is greater still than that shown in Table 12.

In Table 13 is given for each centimeter of length the average age of males and females of the five samples examined (Table 7—11). For each of the sexes the age at a given length is as a rule greatest in the sample from Fehmernbelt (Table 10) and smallest in the Bagenkop samples, but the values for the two remaining samples are not much greater. All the differences here observed are, on the whole, small compared with the differences between these samples and those from the years 1908—1909. The four samples from spring and summer 1921—1922 have been clubbed together and are in Fig. 5 com-

[1] A. C. Johansen: l. c. Tables 9 and 11.

Table 13. Average Age of Plaice of given Length for Samples Tables 7—11.
Number of individuals in brackets.

Sex	♂						♀					
Table number of sample	10	11	12	13	14	10 and 12—14	10	11	12	13	14	10 and 12—14
Length cm												
24	..	..	..	..	4.2 (1)	4.2 (1)	..	..	..	..	3.2 (1)	3.2 (1)
25	3.5 (6)	..	..	4.2 (12)	3.6 (12)	3.8 (30)	3.1 (1)	..	..	4.1 (3)	3.7 (13)	3.7 (17)
26	4.1 (5)	2.5 (1)	4.2 (5)	4.6 (22)	3.6 (20)	4.1 (52)	2.9 (7)	..	..	4.1 (1)	3.7 (47)	3.6 (55)
27	5.5 (3)	2.5 (2)	3.2 (10)	4.8 (19)	3.4 (19)	4.0 (51)	4.1 (2)	..	..	3.9 (5)	3.8 (30)	3.8 (37)
28	3.1 (3)	..	4.2 (10)	5.1 (14)	3.8 (10)	4.3 (37)	4.1 (4)	4.5 (2)	..	4.9 (14)	4.0 (19)	4.4 (37)
29	4.6 (4)	3.5 (5)	3.9 (10)	5.1 (12)	3.8 (3)	4.5 (29)	3.8 (8)	..	..	5.8 (11)	4.5 (9)	4.8 (28)
30	3.1 (3)	3.9 (7)	4.7 (8)	5.3 (5)	4.2 (3)	4.5 (19)	3.6 (19)	3.6 (6)	4.0 (1)	5.7 (5)	3.9 (6)	4.0 (31)
31	4.6 (2)	5.2 (4)	4.7 (10)	5.1 (7)	..	4.8 (19)	3.6 (7)	3.5 (1)	4.7 (4)	6.5 (5)	3.7 (2)	4.7 (18)
32	3.8 (3)	4.0 (2)	3.6 (8)	4.6 (2)	..	3.8 (13)	3.9 (15)	6.7 (4)	4.5 (2)	5.3 (8)	3.2 (2)	4.3 (27)
33	..	5.7 (4)	5.2 (8)	7.1 (2)	..	5.6 (10)	4.3 (6)	3.5 (1)	4.7 (3)	6.6 (2)	4.2 (1)	4.8 (12)
34	..	5.5 (2)	5.1 (8)	7.1 (1)	..	5.5 (9)	5.3 (11)	5.5 (1)	6.2 (5)	7.3 (5)	4.2 (1)	5.9 (22)
35	..	5.5 (3)	5.1 (11)	5.1 (1)	..	5.1 (12)	5.6 (4)	4.8 (3)	7.0 (2)	—	..	6.1 (6)
36	..	4.5 (1)	5.2 (4)	7.1 (1)	..	5.6 (5)	6.3 (7)	5.0 (4)	6.5 (2)	7.1 (3)	..	6.5 (12)
37	..	..	7.0 (5)	..	..	7.0 (5)	5.1 (1)	9.0 (1)	5.7 (4)	—	..	5.6 (5)
38	..	..	..	..	..	..	6.1 (7)	10.8 (3)	5.4 (5)	8.1 (1)	..	6.0 (13)
39	6.6 (2)	..	8.0 (1)	..	..	7.1 (3)	8.6 (4)	5.8 (3)	5.0 (6)	—	..	6.4 (10)
40	..	..	..	..	..	..	7.1 (2)	10.5 (1)	8.5 (2)	7.1 (1)	..	7.7 (5)
41	..	..	..	..	..	..	13.1 (2)	—	6.0 (2)	6.1 (2)	..	8.4 (6)
42	..	..	..	..	..	..	7.1 (1)	—	5.0 (1)	..	..	6.0 (2)
43	..	..	..	..	..	..	..	—	..	..	..	..
44	..	..	..	..	..	..	22.6 (2)	12.5 (1)	..	..	..	22.6 (2)
45	..	..	..	..	..	..	22.1 (1)	..	..	..	..	22.1 (1)
Average Age of sample	4.17 (31)	4.36 (31)	4.59 (98)	4.88 (98)	3.62 (68)	4.42 (295)	5.31 (111)	5.98 (31)	5.57 (39)	5.60 (66)	3.83 (131)	4.84 (347)

pared with the two samples[1] mentioned above from April 1909. The sample from September 1921 (Table 8) has been added to another sample from Bagenkop[2] examined by Dr. C. G. Joh. Petersen in September 1920 and they are in Fig. 6 compared with Reibisch's[3] results 1908—1909 from the waters south of Langeland. The samples from 1908—1909 all contain old and slow-growing individuals, the age of which it has not been possible to determine precisely so that it has been necessary to use the minimum age indicated in the calculation.

The curves in Fig. 5 and 6 leave no doubt that plaice of a given length are much younger now than in 1908—1909. Fig. 5 represents the greater number of observations of the two and the part of the curves running between 25 and 29 cm are especially well founded, each of their means representing 17—57 observations. It is conspicuous that whilst in 1921—1922 the average age for males of a given length is only insignificantly greater than the average age for females of the same length in 1909 males of lengths from 25—29 cm are on an average a couple of years older than females of the same length. The average age for a given length has thus especially decreased for males.

A decrease of age at a given length may partly arise from an increase in the rate of growth and partly from an increased rate of death, for instance, caused by a more intensive fishing, which would diminish the average length of life for each single length-group as well as for the whole stock. We have just demonstrated by means of the seven year old plaice that the rate of growth has highly increased in the Bagenkop area, but it is without doubt that the second cause has also operated in diminishing the average age of the plaice.

The curves for 1908—1909 in Fig. 6 show on the whole a larger average age than the curves for 1909 in Fig. 5. It is perhaps partly due to the fact that the growth in former years as well as in 1922

[1] A. C. Johansen: l. c. Tables 9 and 11.

[2] C. G. Joh. Petersen: l. c. Liste 15.

[3] Reibisch: Biologische Untersuchungen über Gedeihen, Wanderung und Ort der Entstehung der Scholle in der Ostsee 1911, Tabelle V.

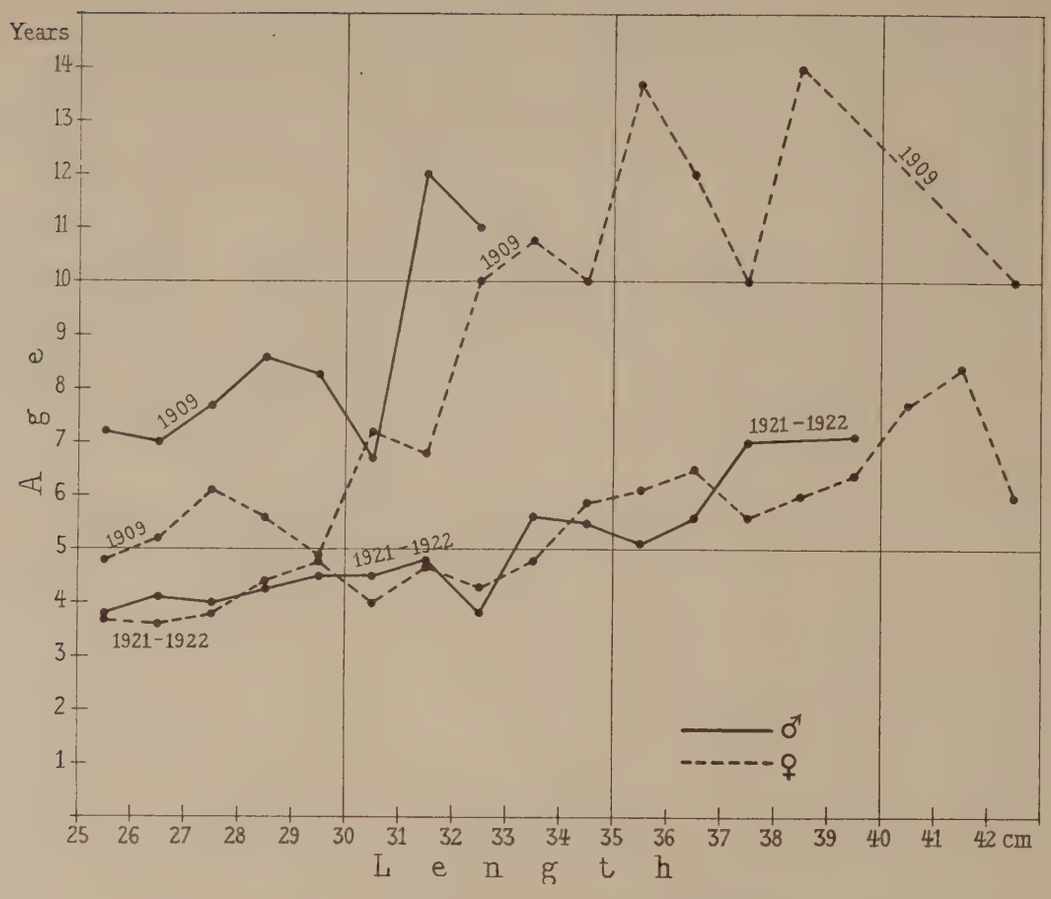

Fig. 5. Average Age of Plaice for given Length.
1909 from JOHANSEN l. c. Tables 9 and 11. — 1921—1922 from Tables 7, 8, 9 and 11.

was more rapid in the Bagenkop area than in the waters south-east of Langeland, but probably it is due still more to a different judgment of the two observers. The plaice were in 1908—1909 slow-growing and the numerous rings of the otolith difficult to interprete.

The Tables (7—11) as well as the corresponding tables for the older measurements show that the females are distinctly larger than males of the same age. Nevertheless the two curves for 1921—1922 in Fig. 5 have practically the same course so that it would be difficult to characterize any of them as the uppermost. This means, that although the females grow more rapidly than the males, males and females of a given length still have the same average age. This could hardly be explained otherwise than by the fact that the females of the market samples are on an average older than the males, so that considering plaice of a given length there would always be a surplus of older females. As a matter of fact we find that the average age of females in each of the samples Table 7—10 is about one year or more older than the average age of the males of the samples. It may be due to the fact that the females become mature at a greater age than the males and do not, before maturity is reached, emigrate to the deeper waters from which the samples have arisen. It might also be explained by a greater mortality among males than among females, but if so it cannot be mortality caused by fishing since the more quickly growing females must suffer more from fishery than males of the same age.

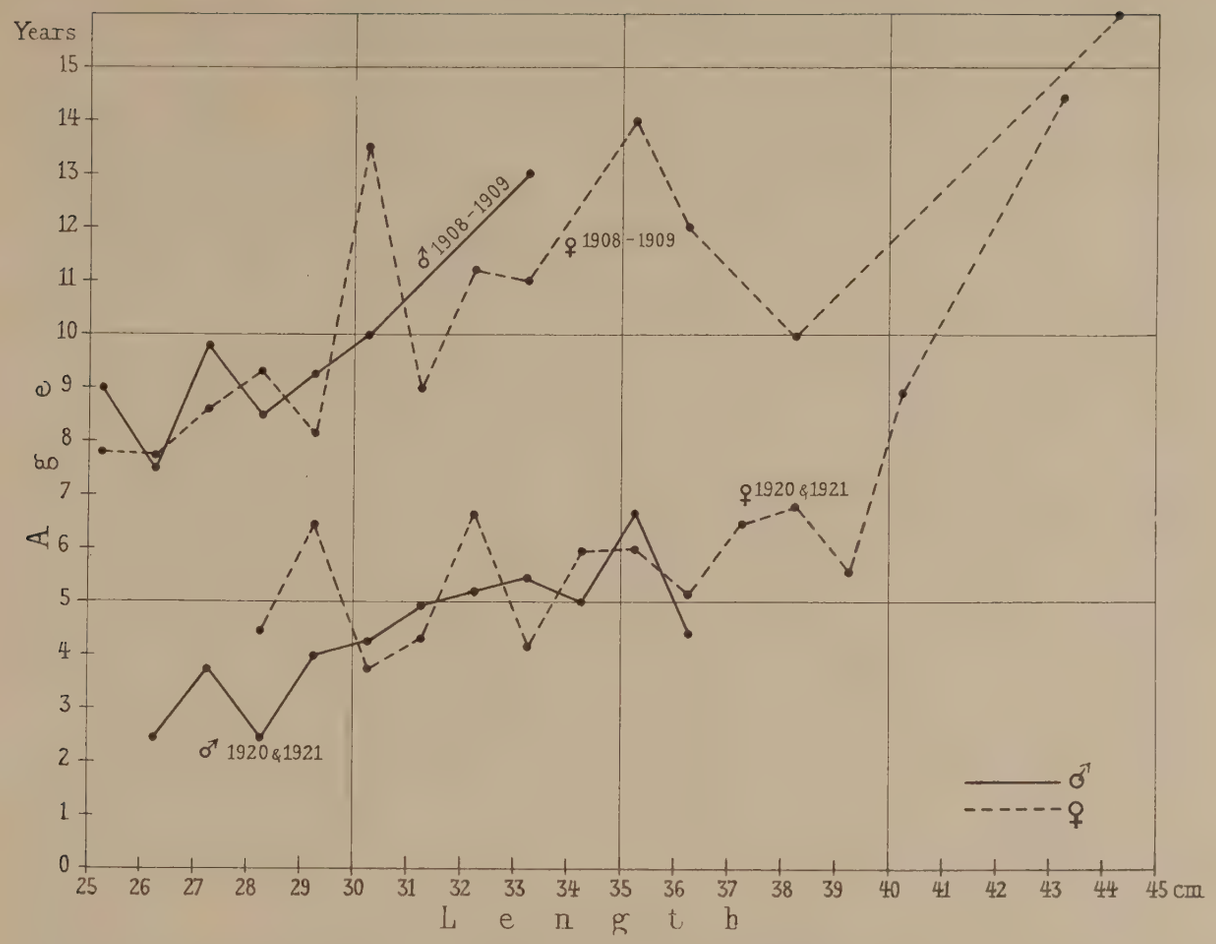

Fig. 6. Average Age of Plaice for given Length.
1908—1909 from Reibisch l. c. Tabelle V. — 1920—1921 from Table 8 and Petersen l. c. Liste 15.

The sample from the Smaalandsbugt (Table 11) differs from the others in that males and females have about the same average age and in that it consists mainly of immature plaice.

For investigating the relative frequency of mature and immature plaice of a given age-group these samples are not well suited, because a number of smaller and presumably mostly immature individuals are wanting in each age-group. In the sample from Smaalandsbugt there is nevertheless a smaller percentage of mature plaice in the III- and IV-group than in unsorted samples from the Great Belt[1] taken in 1907—1909, so that the plaice from the former locality obviously reach maturity at a higher age than the plaice in the Great Belt did formerly.

Considering the maximum length of immature plaice we find in the western Baltic immature males of 29 cm of length and immature females of 32 cm. In the sample from Smaalandsbugt (Table 11) two immature males of 30 cm and a female of 34 cm occur. In samples from the years 1903—1911[2] the largest immature plaice in the western Baltic was a male of 21 cm and a female of 30 cm, and in the Great Belt the greatest immature male and female were, respectively, 28 and 29 cm of length. Thus immature plaice are now found of a greater length than formerly.

[1] Vide Johansen: l. c. Tabel 16 A and B.
[2] Vide Johansen: l. c. Tabel 18 and 19.

V. Is there any evidence that the relative frequency of females has increased in the Western Baltic?

It was shown in chapter II that the relative frequency of the two sexes in the market samples from the Bagenkop area varied distinctly during the period of measurement 1921—1922, so that the females were in striking majority during the summer months and the males in a certain, if less pronounced majority during March—April. A comparison with a few scattered samples from former years therefore do not, at the outset, seem satisfactory for settling the question of a totally altered relative frequency of females. It has however been suggested by Dr. C. G. Joh. Petersen[1] that the relative frequency of females has increased from 1903 or 1908—1909 to 1920, and as the question is one of great interest we shall examine the evidence at hand.

The relative frequencies of females given in Table 1 show clearly that samples from different seasons are not directly comparable. That as great changes may result from a not considerable difference of locality as from difference of season, can be seen by comparing the two samples from Bagenkop (22 m) and Tranekær (9 m) taken in the period 6.—17. April 1909. The first sample contains 15 % (± 1 %) females and the other 92 % (± 2 %) females. The figures illustrate the well-known fact that the females on the whole leave the spawning grounds earlier than the males do and seak to the feeding grounds nearer coast, by which we do not mean to say that the females from the Bagenkop area go so far as to Tranekær.

In comparing the big Bagenkop sample taken with Snurrevaad in 1909[2] with the new market samples we meet with the difficulty that these are sorted before they are landed, and this tends to make the percentage of females greater. The sample from 1909 is not sorted, but the growth was at that time so slow that the males of the III-group was perhaps nevertheless unfairly represented. For comparison of the separate age-groups we have the age-determined sample from 22. March 1922 and we estimate that the sorting caused by the fishing-gear in 1909 and that caused by the conditions of sale in 1922 eliminate about the same percentages of the younger age-groups. As the age of males from 5 years onwards in 1909 could not be accurately given we must take them in one group. The average age given is a minimum value.

It is a striking feature that in 1909 the overwhelming majority of the males are 5 years old or older, while the 3 and 4 year old females comprise 54 % of all females. The males are on an average more

Table 14. Frequencies of Females in the neigbourhood of Bagenkop.

Age in Years	16.—17. April 1909 (22 m) 3 miles SSW of Bagenkop			22. March 1922 (abt. 22 m) 6 miles WSW of Bagenkop				8. Aug. 1908—13. Oct. 1909 Reibisch's Region II		
	♂ Freq.	♀ Freq.	♀ Percentage ± theor. St. D.	♂ Freq.	♀ Freq.	♀ Percentage ± theor. St. D.	♀ Difference of Percentage	♂ Freq.	♀ Freq.	♀ Percentage ± theor. St. D.
3	61	47	44 ± 5	25	4	14 ± 7	30 ± 8	15	< 17	< 53 ± 9
4	50	32	39 ± 5	30	8	21 ± 4	18 ± 7	32	< 32	< 50 ± 6
5 and more	615	53	8 ± 1	42	27	39 ± 6	—31 ± 6	273	< 182	< 40 ± 2
Total sample	817	147	15 ± 1	100	40	29 ± 4	—14 ± 4	325	< 234	< 42 ± 2
Average age	> 5.97	> 4.76	..	4.59	5.57	..	..	6.56	6.85	..
Percentage of ind of 5 years or more	84 ± 1	39 ± 4	..	43 ± 5	69 ± 7	..	..	84 ± 2	78 ± 3	..

[1] l. c. p. 4.

[2] Johansen: l. c. Tabel 11.

than one year older than the females. In 1922 on the contrary the females, as in the other samples from 1921—1922 taken in open sea, are on an average older than the males. The result is that among the 3 and 4 year old plaice females have been more frequent in the sample from 1909 than in that from 1922, while among the five year old and older the females are more frequent now than formerly. We have in the market samples found that the empirical St. D. of the percentage of females was about twice the theoretical St. D., and supposing this holds also here, there is for plaice of five years and older a difference in the percentage of females in 1909 and in 1922 of about $2^1/_2$ time the St. D. of the difference.

Although the two samples compared are taken from about the same locality and season it would be hazardous to generalise and apply this result to the total population and to all seasons. Nevertheless we must admit that there is some evidence in favour of the assertion that among plaice from the age of five years onwards the females are now more frequent than formerly. This would also agree well with the alteration in growth which has taken place in this population. In 1909 the majority of male plaice of five years and older were so small as to be below the Danish size limit, so that the landings contain proportionately few males. But now males of these ages are nearly all above the size limit and therefore as strongly affected by fishing as the females. Therefore, supposing that the relative frequency of two sexes in the two periods have been the same in the fry, and the mortality of the sexes otherwise equal, the older females must in the latter period have come to form an increasing percentage of the older age-groups.

The probality of a greater percentage of females in the total samples in 1922 than in 1909 is less. Examining the 28 gillnet samples from 11.—31. March 1922 we find that the following percentages of females: 17, 17, 13, 11 occur in them, so that the percentage 15 found in 1909 would by no means be extraordinary now.

Besides the great samples mentioned from 1909, there does not from the Bagenkop area exist any age-determined samples for that period in which the number of males and females occur in the natural proportion found in the catches. For Reibisch's aggregate sample from his Region II[1] south of Langeland we find for the percentage of females the higher limits given in Table 14. The material consists of small samples collected during a period of more than a year, but it contains no sample taken between 2. June and 8. Aug., a season when the females were especially numerous in 1921. Let us try to correct roughly Reibisch's percentages in Table 14 and our own results from the market samples 1921—1922 in order to account for the different seasons. From Table 1 we may estimate the percentage of females in the market samples as follows:

June—Aug.	73
Dec.—Febr.	40
March—April	41

About the autumn months we know nothing; supposing the percentages for these months lie between 73 and 40, we arrive for the annual average in 1921—1922 at the limits 47 and 57. Looking next at the higher limit 42 obtained from Reibisch's samples and reckoning that the average percentage for the two summer months, for which Reibisch has no material, is 20—30 greater than for the other 10 months of the year, we find in 1908—1909 for the year the percentage 45 or 47. There is therefore in Reibisch's sample some evidence pointing to the fact that the females of the age-groups which now compose the market-samples are relatively more frequent than in 1909.

If we, always supposing that the sorting of the gear in 1908—1909 and the sorting caused by sale conditions in 1921—1922 exclude about the same percentage of the younger age-groups, compare the average ages of the samples from 1921—1922 (Table 13) with the two from 1908—1909 (Table 14), we find that there was at the earlier period decidedly a greater percentage of old individuals among the males and, considering that Reibisch's material represents a larger area and therefore in this point carries more weight than the Bagenkop sample, we can perhaps say the same in the case of the females.

[1] Reibisch: l. c. Tabel V.

We have tried to undertake a comparison of the number of females on the basis of groups containing plaice of a given or over a given age. If instead of this we could compare market plaice from the two periods the result would of course be very much different since the growth has altered so much. We have two samples[1] taken in the neighbourhood of Bagenkop, in which we know the percentage of females among fish greater than 25 cm and the results are given in the following table:

Percentage of females among plaice greater than 25 cm.

Date	Percentage ± St. D.	Depth. m.
13. November 1905	42 ± 7	21
15. March 1907	27 ± 6	25

The values for March 1907 agree well with the new data for 1922, the average for gillnet samples in March being 0.29 ± 2 and the values for Nov. 1905 is about equal to the mean for the first part of January 1922.

We may summarize as follows: There is a probability that the market plaice, which is now much younger than at the earlier period of investigation (1905—1909), contains about the same percentage of males and females in both periods. There is some evidence that the age-groups from five years onwards now contain a greater percentage of females than about 13 years ago, while there are no signs that the same holds for the III- and IV-group. It seems therefore probable that the increased percentage of females among plaice older than five years and five years old is due to increase of growth and accordingly altered probability for capture and sale and not to an altered distribution in the fry.

VI. Summary.

We have found that the market samples from Bagenkop taken in the western Baltic about the south end of Langeland in 1920—1921 consist of plaice which on an average are at least $3^1/_2$ cm larger than in 1910—1911. The weight per score has since the earlier period of investigation increased from about 5 kg to 7—8 kg. The relative frequency of plaice over 35 cm has very much increased and the maximum length observed is now 7 cm greater than formerly. The age-determined samples have shown that during the years prior to the latter period of investigation the growth has been much quicker than during the years prior to the former period of investigation, and that the average age of the size of plaice which compose the market samples is much smaller in 1921—1922 than ten years before. An investigation of the frequencies of the two sexes shew that south of Bagenkop in the spawning area the females were in great majority in the market plaice during June—August while the males were in majority during March—April. The age-determined samples afford some evidence for the assumption that, considering plaice of five years of age and older, the females have now a greater relative frequency than formerly. But as regards the total market samples it is probable that the frequency of males and females is about unaltered, because a very great part of the five year old males were formerly below the size limit.

An explanation of what has happened has already been given by Dr. C. G. Joh. Petersen and the evidence here provided strengthens his interpretation. We must assume that the increasing intensity of the fishing has caused a thinning of the population, in which the old individuals especially have been removed, and which has given better conditions of growth to the young plaice — a phenomenon which was also observed in the North Sea, the Skagerak, and the Cattegat in the years preceding the war. The result has been that the large percentage of old plaice has disappeared, so that the marketable stock now consists chiefly of plaice of 3—6 years. They have however so quick a growth that their average length exceeds that of the previous market samples by more than $3^1/_2$ centimeter.

[1] Vide Johansen: l. c. pp. 64—65.

DANSK RESUME

Kirstine Smith: Undersøgelser af Rødspætter fra den vestlige Østersø. Juni 1921—August 1922.

I. Indledning.

Blandt Fiskere har det i den sidste halve Snes Aar været en almindelig Opfattelse, at man kunde spore en Forbedring af Kvaliteten af Rødspætterne i Bælthavet. I 1920 har Dr. C. G. Joh. Petersen undersøgt et mindre Antal Prøver fra Bælthavet, der sammenlignet med forskellige Prøver fra de første ti Aar af Aarhundredet tydede paa, at Rødspættebestanden i den mellemliggende Tid havde skiftet Karakter.

Kommissionen for Havundersøgelser har nu skaffet et Maalemateriale til Veje, som i Forbindelse med forskellige aldersundersøgte Prøver godtgør, at der har fundet en væsentlig Forandring Sted. De maalte Rødspætter stammer alle fra et temmelig lille Omraade omkring Sydspidsen af Langeland, fra hvilket der foreligger Maalinger foretaget i 1910—1911. De nye Maalinger, som Dr. A. C. Johansen har overgivet mig til Bearbejdelse, er foretaget i Bagenkop af Hr. Toldbetjent Chr. Erichsen. Maalinger blev foretaget i Juni—August 1921, blev genoptaget i Januar 1922 og kun afbrudt af den strenge Frostperiode, der standsede Fiskeriet, fortsat til hen i April. Alle disse Maalinger angaar Fisk fra det Omraade, som paa Fig. 1 er mærket 'I'. I Juni—August 1922 har man særlig søgt at maale Prøver fra Langelandsbælt (Areal II) og Ristingebugt (Areal III), et Omraade, som blev stærkere befisket tidligere end nu. Foruden Fiskenes Længde er ogsaa deres Køn bestemt. Det viser sig, at den relative Hyppighed af Hanner og Hunner i Markedsfisk fra dette Omraade har en tydelig aarlig Variation, hvoraf følger, at den gennemsnitlige Længde af Markedsfisken ogsaa varierer i Løbet af Aaret.

II. Længdemaalinger udførte i 1921 og 1922.

Der er ialt maalt 37,254 Rødspætter fordelt paa 271 Prøver. Maalingerne er angivet i hele Centimetre med Bortkasten af overskydende Brøkdele. Prøverne hidrører fra Fangster taget med Garn og Skovlvaad og er ordnede efter Fangstredskabet. Maalingen foregaar i Land og de ilandbragte Fisks Længde er paavirket af de gældende Salgsvilkaar. Det er nu tilladt at ilandbringe Rødspætter paa over 22,0 cm Totallængde paa de danske Kyster ved denne Del af den vestlige Østersø, men kun til stedligt Brug og direkte Eksport. Til almindeligt Salg i Danmark fordres en Minimumslængde af 25,7 cm, og praktisk talt ilandbringes der ingen Fisk under den Længde.

I Reglen er Prøver fra paa hinanden følgende Dage meget ensartede, men et Par Gange under Maalingernes Forløb finder man pludselige Forandringer i Prøvernes Sammensætning, som maa skyldes Vandringer. I Tabel 1 er Prøverne grupperede, saaledes at der ikke indenfor samme Gruppe forekommer pludselige Spring i Middelværdierne. De angivne empiriske Middelfejl giver derfor et godt Maal for Middelværdiernes Usikkerhed.

Man ser af Tabel 1, at i Sommermaanederne er Majoriteten af Markedsrødspætterne Hunner. Dette gælder saavel Prøverne fra Langelandsbælt og Ristingebugten som Omraadet I syd og sydvest for Langeland. Fra dette Omraade kan man til Dels paavise en aarlig Variation i den relative Hyppighed af Hunner. Vi finder, at Antallet af Hunner i Maanederne Juni—August gennemsnitlig udgør omtrent 70% af det samlede Antal Markedsrødspætter. I Januar er deres relative Hyppighed faldet til 50—60% og i Marts, da den naar et Minimum, udgør Hunnerne kun ca. 30% af alle Fisk, men derefter stiger Procenttallet og er for April omtrent 40%. Man ser, at den relative Hyppighed af Hanner og Hunner varierer saa stærkt med Aarstiden, at man ikke fra

nogle faa spredte Prøver, taget paa forskellig Aarstid og fra forskellig Lokalitet, tør drage Slutninger om en i det store og hele ændret relativ Hyppighed af de to Køn.

Det ses af Tabellen, at Hannerne fra Omraade I er større om Sommeren end om Vinteren og Foraaret, det samme gælder om Hunnerne i Garnprøverne. Mere afgørende for den aarlige Svingning i Gennemsnitslængden end disse Forskelle er dog den aarlige Svingning i Kønnenes relative Hyppighed. Hunnerne er gennemsnitlig 4—6 cm længere end Hannerne, hvoraf følger, at endogsaa for Skovlvaadsprøverne er den gennemsnitlige Længde mere end 1 cm større om Sommeren, naar Hunnerne er talrigt repræsenterede, end om Foraaret, naar de to Køn i disse Prøver optræder omtrent lige hyppigt. For Garnprøverne beløber Forskellen imellem Gennemsnitslængden Sommer og Foraar sig til omtrent 2,5 cm.

For Langelandsbæltet finder man i Sommeren 1922 omtrent den samme eller maaske en lidt større Gennemsnitslængde end i Omraadet I. I Ristingebugten er Fisken noget mindre.

Tab. 2—4 giver for længere Tidsrum Fordelingen af 10,000 Rødspætter og 1000 kg Rødspætter henholdsvis efter Længde og Køn. Af Tab. 4 ser man, at Hannerne om Sommeren kun udgør ca. 20 % af den samlede Vægt af Markedsfisken, og at paa den Aarstid, da de er hyppigst og deres Antal 64 % af det samlede Antal i Garnfangsterne, udgør de kun 55 % af den samlede Vægt.

III. Sammenligning mellem Længden af Markedsrødspætter i 1921—1922 og i 1910—1911.

Maalingerne blev i 1910—1911 udført paa samme Maade som i 1921—1922, naar undtages, at Kønnet i den første Periode ikke blev bestemt. Tab. 5 giver et Sammendrag af de Værdier fra Tab. 1, for hvilke der fra den tidligere Maaleperiode foreligger Bestemmelser. Talværdierne for 1910—1911 afviger iøjnefaldende fra de nye Værdier, som viser, at Rødspætterne nu gennemgaaende er meget større end tidligere.

Maalingerne for Januar—Februar 1911 kan bedst sammenlignes med Skovlvaadsprøverne fra Januar—April 1922 og Garnprøverne fra Marts—April 1922. Vi ser, at Gennemsnitslængden er mindst $3^1/_2$ cm mindre, Procenttallet af Rødspætter mindre end 30 cm omtrent 40 større og Procenttallet af Rødspætter længere end 35 cm omtrent 25 mindre i 1911 end i 1922. Den gennemsnitlige Vægt pr. Snes er over 2 kg mindre i 1911 end i 1922. Prøverne fra 1911 stammer fra Fiskepladser, hvis gennemsnitlige Dybde er 18 m, medens de nye Priser er fra en gennemsnitlig Dybde af 22—23 m. Dette har imidlertid ingen væsentlig Betydning, for sammenlignes Prøverne fra de dybeste Fiskepladser i 1911 med dem fra de grundeste Pladser i 1922, viser det sig, at deres gennemsnitlige Længder afvige endnu mere fra hinanden, end Gennemsnitslængderne af samtlige Prøver for de to Maaleperioder gjorde.

For Langelandsbælt ser vi af Tabel 5, at Gennemsnitslængden i Sommeren 1910—1911 var omtrent 5 cm mindre, Procenttallet af Rødspætter under 30 cm omtrent 40 større, Procenttallet af Rødspætter over 35 cm omtrent 40 mindre og Vægten pr. Snes næsten 3 kg mindre end i Sommeren 1922. Ogsaa i dette Tilfælde stammer Prøverne i 1910—1911 fra et grundere Omraade end de nye Prøver, men heller ikke her finder vi ved at udvælge Prøver fra Fiskepladser, hvis Dybder stemmer bedre overens, at Prøvernes Gennemsnitslængder nærmer sig til hinanden.

Skovlvaadsprøverne fra Juli—August 1911 hidrører fra saa ringe Dybder, at vi ikke i det nye Materiale har Maalinger fra tilnærmelsesvis saa grundt Vand. Men de Resultater, vi netop er kommet til, lader formode at nogle Meters Forskel i Dybden ikke har nogen afgørende Betydning for Gennemsnitslængden af Rødspætterne, og at naar der findes saa betydelige Afvigelser mellem disse Prøver og Garnprøverne fra Ristingebugten taget i Juni—August 1922, maa det i det væsentlige skyldes en gennemgribende Forandring i Bestanden fra 1911 til 1922.

Vi kan sammenfatte Resultaterne fra samtlige Maalinger saaledes: Gennemsnitslængden af Markedsrødspætterne er fra 1910—1911 til 1921—1922 steget mindst $3^1/_2$ cm. Fisk længere end 35 cm udgør nu i Sommermaanederne næsten Halvdelen, medens deres Antal før højst var 14 % af samtlige Fisk. Gennemsnitsvægten pr. Snes er steget fra 4—$5^1/_2$ kg til 7—8 kg.

Fig. 2—4 giver en Sammenligning mellem de tre Grupper Maalinger fra 1910—1911, som her er omtalt, og de nye Maalinger. Kurverne fremstiller pr. 1000 Fisk Hyppighedsfordelingen mellem de forskellige Længder (se Tab. 2—3). I hver af de tre Figurer skiller Kurverne for 1910—1911 sig tydelig ud fra Kurverne for 1921—1922 ved, at Maximumshyppigheden hos dem falder paa meget mindre Længder.

Det er ikke alene Gennemsnitslængden af Markedsrødspætterne, der er tiltaget i den sidste halve Snes Aar, ogsaa den forefundne maximale Længde er nu større end tidligere. Imellem de i 1921—1922 maalte 37,254 Individer forekommer 33 paa 47 cm og 38 af Længder fra 48 til 54 cm. Imellem de 31,906 Rødspætter, som blev maalt i 1910—1911, var ingen længer end 47 cm og kun 5 havde denne Længde.

IV. Alderen af Rødspætterne i Bælthavet.

Aldersbestemmelse ved Otolither er i 1921—1922 foretaget paa to Prøver fra Bagenkopomraadet, to fra Omraadet mellem Lolland og Fehmern og een Prøve fra Smaalandsbugten (Tab. 7—11). Prøverne er Markedsrødspætter, saa at de yngre Aarsgrupper er ufuldstændigt repræsenterede, og de beregnede Gennemsnitslængder for yngre Aarsgrupper har en derved begrændset Anvendelighed. De viser dog, at Væksten er hurtigst i Bagenkopomraadet og langsomst i Fehmernbælt.

Man maa antage, at de 7 Aar gamle Fisk er upaavirkede af Sortering, og de er derfor egnede til Sammenligning med Rødspætter af samme Alder fra ældre usorterede Prøver. Vi har fra April 1909 to saadanne Prøver fra Bagenkopomraadet og fra Tranekær. I Tab. 12 anføres den gennemsnitlige Længde af de Rødspætter, som er angivet at være syv Aar eller mere ubestemt over syv Aar. Man ser, at den gennemsnitlige Længde af syvaarige Rødspætter, saavel af Hanner som af Hunner, er 8—9 cm større i 1921—1922 end i 1909.

Tab. 13 angiver for hver Centimeters Længde Gennemsnitsalderen for Hanner og for Hunner i hver af de fem Prøver. For begge Køn er Gennemsnitsalderen i Reglen størst i Prøven fra Fehmernbælt og mindst i Bagenkopprøverne. Disse Forskelle er dog smaa i Sammenligning med Forskellen mellem disse Prøver og Prøver fra 1908—1909. De fire Prøver, som er taget om Foraaret og om Sommeren i 1921—1922, er slaaet sammen og sammenlignes paa Fig. 5 med de to nævnte Prøver fra 1909. Prøven fra September 1921 er slaaet sammen med en anden Prøve fra Bagenkopomraadet, undersøgt af Dr. C. G. Joh. Petersen i September 1920, og de sammenlignes paa Fig. 6 med Reibisch's Resultater 1908—1909 fra Farvandet syd for Langeland. Prøverne fra 1908—1909 indeholder alle langsomt voksende Individer, hvis Alder ikke har kunnet bestemmes nøjagtigt, og de beregnede Gennemsnitsaldre er Minimumsværdier. De to Figurer viser tydeligt, at Rødspætter af en given Længde er meget yngre nu end i 1908—1909. Kurverne paa Fig. 5, og især den Del af dem, som ligger mellem 25 og 29 cm, støtter sig paa de fleste Iagttagelser. For disse Længder er Hannerne i 1909 gennemgaaende et Par Aar ældre end Hunnerne, medens der i 1921—1922 kun er en ubetydelig Forskel mellem de to Køns Gennemsnitsalder.

En Formindskelse af Gennemsnitsalderen for en given Længde kan dels hidrøre fra en forøget Væksthastighed og dels fra en forøget Dødelighed. Vi har ovenfor vist, at den første Aarsag er til Stede, men den anden har utvivlsomt ogsaa ved den stigende Intensitet af Fiskeriet været medvirkende til at formindske Gennemsnitsalderen.

Kurverne for 1908—1909 paa Fig. 6 viser en højere Gennemsnitsalder end Kurverne for 1909 paa Fig. 5. Det skyldes maaske til Dels de forskellige Lokaliteter men maaske endnu mere forskellig Vurdering af Otolithringene, som dengang var vanskelige at aflæse.

Tab. 7—11 og de tilsvarende Tabeller for de ældre Maalinger viser, at Hunner er afgjort større end Hanner af samme Alder. Alligevel følges de to Kurver for 1921—1922 i Fig. 5 praktisk talt ad. Dette maa forklares derved, at Hunnerne i Markedsprøverne gennemgaaende er ældre end Hannerne, saa at der for hver given Længde bestandig er et Overskud af ældre Hunner. Det maa enten hidrøre fra, at Hunnerne først i en ældre Alder end Hannerne søge ud fra Kysterne, eller fra en større Dødelighed blandt Hanner end blandt Hunner.

Til Bedømmelsen af Størrelsen og Alderen ved Modenhedens Indtræden er Materialet kun sparsomt. Men det synes, at Modenheden i Smaalandsbugten nu indtræder senere, end den før gjorde i Storebælt, og at der nu saavel ved Bagenkop som i Smaalandsbugten forekommer større umodne Fisk end tidligere.

V. Tyder de foreliggende Iagttagelser paa, at Hunnerne er blevet relativt talrigere i den vestlige Østersø?

Vi saa i Kap. II, at den relative Hyppighed, at de to Køn i Markedsprøverne fra Bagenkop variered tydeligt under Maaleperioden 1921—1922, saaledes at Hunnerne var i stærkt Flertal i Sommermaanederne og Hannerne i afgjort om end mindre udtalt Flertal i Marts—April. En Sammenligning med nogle faa spredte Prøver fra tidligere Aar synes derfor paa Forhaand utilfredsstillende, naar det gælder at undersøge, om den relative Hyppighed af de to Køn har ændret sig i Aarenes Løb. Dr. C. G. Joh. Petersen har imidlertid antydet, at Hunnerne var blevet forholdsvis hyppigere fra 1903 eller 1908—1909 til 1920, og da Spørgsmaalet er af saa stor Interesse, skal de foreliggende Iagttagelser undersøges.

Fra April 1909 foreligger den store aldersanalyserede Bagenkopprøve taget med Snurrevaad. Denne Prøve er usorteret, men Væksten var dengang saa langsom, at Hannerne af III-Gruppen dog maaske ikke er fuldstændigt repræsenterede i Prøven. Fra 1922 har vi til Sammenligning af de enkelte Aldersgrupper Prøven fra Marts (Tabel 9). Man kan antage, at Sorteringen foraarsaget af Fiskeredskabet i 1909 og Sorteringen foraarsaget af Salgsbetingelserne i 1922 bortskærer tilnærmelsesvis de samme Procentdele af de yngre Aldersgrupper.

Af Tabel 14 ses det, at blandt 3- og 4-aarige Rødspætter var Hunnerne talrigere i 1909 end i 1922, men blandt Rødspætter paa 5 Aar og derover var Hunnerne talrigere i 1922 end i 1909. I 1909 aftager den relative Hyppighed af Hunner med Alderen, hvilket maa synes en rimelig Følge af Fiskeriet. Men i 1922 vokser Hyppigheden af Hunnerne med Alderen, hvilket rimeligvis maa forklares ved, at Hunner af de yngre Aargange endnu ikke er gaaet ud paa saa dybt Vand. Det er derfor tvivlsomt, om man tør lægge nogen Vægt paa den forefundne Afvigelse mellem de relative Hyppigheder af Hunner under 5 Aar i 1909 og 1922, hvorimod der maa tillægges den for 5-aarige og ældre Rødspætter fundne forøgede Hyppighed af Hunner større Betydning. Skønt de to sammenlignede Prøver er taget fra meget nær samme Sted og paa samme Aarstid er det voveligt at generalisere og slutte, at Hunnernes relative Hyppighed i det store og hele er tiltaget. Men man maa indrømme, at de to Prøver taler til Gunst for den Opfattelse, at fra 5 Aars Alderen er Hunnerne nu talrigere end i 1909. Dette vilde ogsaa stemme godt overens med den Vækstforandring, som har fundet Sted. I 1909 var Størsteparten af Hannnerne paa 5 Aar og derover mindre end det danske Mindstemaal, saa at Fiskeriet kun i ringe Grad gik ud over dem. Nu er Hanner af den Alder næsten alle større end Mindstemaalet og lige saa efterstræbte som Hunnerne. Hvis den relative Hyppighed af de to Køn i Ynglen er uforandret og Dødeligheden ellers er ens for dem, maa Hunnerne være kommet til at udgøre en større Procentdel af de ældre Aarsgrupper end tidligere.

Sandsynligheden for at Hunnerne i 1922 udgør en større Procentdel af hele Prøven, end de gjorde i 1919 er mindre. Blandt de 28 Garnprøver fra 11.—31. Marts 1922 forekommer følgende Procenttal Hunner: 17, 17, 13, 11. Procenttallet 15 fra Marts 1909 (Tabel 14) vilde saaledes ikke være usædvanligt nu.

Foruden den nævnte store Prøve fra 1909 forefindes der ingen aldersbestemte Prøver fra den Tid, i hvilke det relative Antal af Hanner og Hunner er det naturligt forekommende. For Reibisch's Samling af mindre Prøver fra Region II syd for Langeland er de højere Grænser for Procenttallet af Hunner angivet i Tabel 14. Prøverne er indsamlede i Løbet af et Aar, men ingen Prøver er taget i Tiden fra 2. Juni til 8. Aug. I vore egne Markedsprøver mangler der Prøver fra Efteraarsmaanederne, men vi skal forsøge en raa Korrektion af begge Gruppers Procenttal, saa de bliver sammenlignelige. Paa Grundlag af Tabel 1 kan man anslaa Procenttallet af Hunner til at være:

Juni—August	73
December—Februar	40
Marts—Maj	41

Antager man, at Procenttallet for de tre Efteraarsmaaneder ligger mellem 73 og 40, finder man for hele Aaret Grænserne 47 og 57. For Reibisch's Prøver er den højere Grænse 42, og regner vi, at det gennemsnitlige Procenttal for de to Sommermaaneder, i hvilke der ingen Prøver er taget, er 20—30 større end for de øvrige 10 Maaneder af Aaret, finder man for hele Aaret Procenttallene 45 og 47, som er at betragte som højere Grænser for Procenttallet af Hunner. Der er derfor her fundet et Vidnesbyrd om, at Hunnerne blandt de Aldersgrupper, som nu udgør Markedsrødspætterne, er relativt hyppigere end i 1909.

Dersom vi — stadig under den Forudsætning, at Redskabet i 1908—1909 foraarsagede samme procentvise Sortering pr. Aldersgruppe som Salgsbetingelserne nu bevirker — sammenligner den gennemsnitlige Alder for Prøverne fra 1921—1922 (Tabel 13) med den gennemsnitlige Alder for de to Prøver fra 1908—1909 (Tabel 14) ser vi, at der i denne Periode var mange flere gamle Hanner. I Betragtning af at Reibisch's Materiale repræsenterer et større Omraade og derfor paa dette Punkt maa tillægges større Vægt, kan vi maaske sige det samme om Hunnerne.

Vi har forsøgt at foretage en Sammenligning af den relative Hyppighed af Hunner efter Aarsgrupper. Hvis vi kunde sammenligne Markedsfisk fra de to Perioder, vilde Resultatet blive ganske forskelligt, da Væksten har forandret sig saa stærkt. For to Prøver taget i Nærheden af Bagenkop i Nov. 1905 og i Marts 1907 er blandt Rødspætter over 25 cm henholdsvis 42 (± 7) og 27 (± 6) Procent Hunner. Værdien for Marts 1907 stemmer godt med Resultaterne fra Marts 1922 og Værdien for Nov. 1905 er omtrent lig med Middelværdien for den første Del af Jan. 1922.

Vi kan sammenfatte Resultaterne saaledes: Det er sandsynligt, at Markedsrødspætterne, som nu er meget yngre end i (1905—1909) indeholder omtrent de samme Procenttal af Hanner og Hunner som i den tidligere Periode. Der er Tegn paa, at Aldersgrupperne fra 5 Aar og derover nu indeholder relativt flere Hunner end for ca. 13 Aar siden, men der er ingen Antydning af, at dette ogsaa gælder for 3- og 4-aarige Fisk. Det er derfor sandsynligt, at det forøgede Procenttal Hunner blandt ældre Rødspætter, hvis det findes for den samlede Bestand, skyldes den stærkere Vækst og den som Følge deraf ændrede Sandsynlighed for Fangst og ikke en ændret Hyppighedsfordeling blandt Ynglen.

VI. Sammenfattende Bemærkninger.

Vi har fundet, at Markedsrødspætterne fra Bagenkop taget i den vestlige Østersø omkring Sydspidsen af Langeland i 1921—1922 bestaar af Rødspætter, som gennemsnitlig er mindst 3,5 cm længere end i 1910—1911. Vægten pr. Snes er vokset fra ca. 5 til 7—8 kg. Den relative Hyppighed af Rødspætter over 35 cm er tiltaget meget og den iagttagne maximale Længde er 7 cm længere end tidligere. De aldersundersøgte Prøver har vist, at Væksten i Aarene forud for den sidste Maaleperiode har været meget hurtigere end i Aarene forud for den tidligere Maaleperiode, og at Gennemsnitsalderen for de Størrelsesklasser af Rødspætter, af hvilke Markedsrødspætterne bestaar, er meget mindre i 1921—1922 end ti Aar før. En Undersøgelse af den relative Hyppighed af Hanner og Hunner har vist, at i Yngleomraadet syd for Bagenkop var Hunnerne i stærkt Flertal blandt Markedsfisken i Juni—August, medens Hannerne var i Majoritet i Marts—April. De aldersbestemte Prøver taler til Gunst for den Antagelse, at blandt Fisk paa fem Aar og derover er Hunnerne nu relativt hyppigere end 13 Aar tidligere. Men ser man paa den samlede Markedsfisk er det sandsynligt, at den relative Hyppighed af Hanner og Hunner er uforandret, fordi en meget stor Del af de femaarige Hanner tidligere var under Mindstemaalet.

En Forklaring paa hvad der er sket, er allerede givet af Dr. C. G. Joh. Petersen, og de her meddelte Iagttagelser styrker hans Fortolkning. Vi maa antage, at det intensive Fiskeri har udtyndet Bestanden og særlig fjærnet de gamle Individer, saaledes som det i Aarene forud for Krigen er iagttaget for Nordsøens, Skageraks og Kattegats Vedkommende. Herved er Vækstbetingelserne blevet forbedrede, saa at vi nu istedetfor en gammel, langsomt voksende Bestand har faaet en yngre, hurtig voksende. Markedsrødspætterne bestaar nu væsentlig af Fisk paa 3—6 Aar, som imidlertid har haft en saa hurtig Vækst, at deres gennemsnitlige Længde er mere end 3,5 cm større end den gennemsnitlige Længde af Markedsrødspætterne i 1910—1911.

Table of Measurements I — Length o

June—August 1921, January 1922

Fishing-gear	Skovlvaad																							
Date of capture	5. VI. 21			5. VI. 21			6. VI. 21			6. VI. 21			6. VI. 21			7. VI. 21			7. VI. 21			25. VI. 21		
Fishing-place	6 miles SE of Gulstav			5 miles SE of Gulstav			6 miles SE of Gulstav			6 miles SE of Gulstav			6 miles SW of Gulstav			6 miles SW of Gulstav			6 miles SE of Gulstav			7 miles SW of Gulstav		
Depth in m	23			23			23			23			23			23			23			23		
Weight pro score in kg	8.75			9			9			8.75			8.75			8.75			9			9		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+
Length cm																								
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	1	2	..	2	1	..	1
26	..	..	..	2	..	2	..	..	..	4	3	7	5	1	6	..	..	..	2	..	2	3	..	3
27	1	1	2	1	..	1	1	1	2	4	2	6	4	4	8	..	1	1	3	1	4	1	..	1
28	..	3	3	..	2	2	2	..	2	5	3	8	5	2	7	1	1	2	1	1	2	4	1	5
29	10	3	13	4	4	8	5	3	8	6	1	7	9	3	12	7	1	8	3	4	7	2	2	4
30	7	5	12	5	8	13	4	12	16	2	10	12	3	7	10	4	5	9	6	3	9	6	6	12
31	3	2	5	11	5	16	4	9	13	7	4	11	9	6	15	10	7	17	7	4	11	2	5	7
32	7	8	15	3	7	10	11	9	20	11	8	19	6	12	18	2	5	7	7	5	12	10	8	18
33	10	8	18	8	12	20	6	12	18	6	6	12	12	11	23	8	6	14	3	19	22	6	17	23
34	4	11	15	10	6	16	6	13	19	4	13	17	2	9	11	5	10	15	7	7	14	7	15	22
35	3	13	16	3	15	18	3	17	20	1	10	11	2	9	11	3	10	13	2	16	18	2	12	14
36	2	12	14	2	14	16	3	8	11	2	5	7	1	6	7	1	6	7	2	8	10	3	10	13
37	2	8	10	2	5	7	1	14	15	..	10	10	..	7	7	..	11	11	3	9	12	..	6	6
38	..	10	10	1	10	11	..	7	7	..	8	8	..	9	9	1	6	7	..	10	10	..	12	12
39	..	4	4	1	6	7	..	6	6	..	11	11	..	6	6	..	3	3	1	11	12	1	1	2
40	..	6	6	1	2	3	..	2	2	..	5	5	..	4	4	..	2	2	..	2	2	..	4	4
41	..	..	..	..	1	1	..	3	3	..	2	2	..	3	3	..	3	3	..	..	..	..	..	..
42	..	1	1	..	..	..	..	..	..	..	2	2	..	..	..	..	2	2	..	2	2	..	1	1
43	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	1	1
44	..	..	..	..	..	..	..	1	1	..	1	1	..	1	1	..	..	..	..	1	1	..	1	1
45	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	49	95	144	54	98	152	46	117	163	53	106	159	58	100	158	42	80	122	49	103	152	48	102	150
Average length[1] cm	31.86	34.79	33.79	32.48	34.54	33.81	32.09	34.42	33.76	30.58	34.85	33.43	30.52	34.19	32.84	31.86	34.74	33.75	31.59	35.03	33.92	31 56	34.65	33.6

Fishing-gear	Skovlvaad																							
Date of capture	9. VII. 21			9. VII 21			9. VII. 21			9. VII. 21			9. VII. 21			10. VII 21			10. VII. 21			10. VII. 21		
Fishing-place	7 miles SE of Gulstav			6 miles SSE of Gulstav			7 miles SE of Gulstav			7 miles S of Gulstav			8 miles SSE of Gulstav			5 miles SE of Gulstav			2 miles S of Kjelds Nor			2 miles S of Kjelds Nor		
Depth in m	23			23			23			23			23			23			15			15		
Weight pro score in kg	9.5			9			9			9.25			9			9.25			9.5			9.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+
Length cm																								
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	1	1	..	..	..
26	3	..	3	..	..	..	4	..	4	2	..	2	1	..	1	2	1	3	..	2	2	1	1	2
27	3	1	4	2	1	3	2	..	2	1	..	1	..	1	1	2	..	2	1	..	1	1	..	1
28	2	2	4	3	1	4	2	..	2	1	1	2	..	..	..	..	..	..	2	3	5	1	..	1
29	2	1	3	2	1	3	4	1	5	2	..	2	1	2	3	2	1	3	1	..	1	3	1	4
30	5	3	8	4	2	6	5	1	6	3	1	4	4	..	4	4	..	4	4	3	7	2	2	4
31	3	4	7	3	3	6	9	5	14	7	2	9	2	2	4	7	2	9	5	3	8	6	4	10
32	9	11	20	3	2	5	6	6	12	3	4	7	9	4	13	6	2	8	3	5	8	4	4	8
33	13	9	22	4	6	10	9	12	21	5	6	11	6	4	10	6	6	12	4	3	7	3	6	9
34	5	14	19	3	7	10	1	11	12	5	4	9	4	11	15	7	13	20	4	9	13	3	7	10
35	3	15	18	3	10	13	2	6	8	..	11	11	4	8	12	5	12	17	6	5	11	3	14	17
36	2	18	20	2	15	17	1	22	23	1	11	12	4	17	21	1	16	17	2	6	8	1	11	12
37	1	18	19	2	12	14	..	16	16	..	10	10	2	15	17	1	19	20	..	8	8	..	7	7
38	..	7	7	..	12	12	..	11	11	..	5	5	..	6	6	1	9	10	..	5	5	..	6	6
39	..	9	9	1	6	7	..	12	12	..	4	4	..	10	10	..	6	6	..	2	2	..	2	2
40	1	5	6	..	3	3	..	5	5	..	7	7	..	3	3	..	3	3	..	6	6	..	3	3
41	..	3	3	..	4	4	..	3	3	..	..	..	..	..	..	..	1	1	..	4	4	..	1	1
42	..	2	2	..	1	1	..	..	..	..	..	..	1	1	2	..	3	3	..	2	2	..	..	..
43	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	2	2	..	2	2	..	..	..
44	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
45	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..
Total number	52	122	174	32	90	122	45	111	156	30	67	97	38	84	122	45	98	143	33	70	103	28	69	97
Average length[1] cm	31.87	35.36	34.32	32.16	36.24	35.17	30.84	35.85	34.10	31.30	35.58	34.26	33.15	35.81	34.98	31.98	36.10	34.80	32.70	35.47	34.58	31 57	35.00	34.

[1] Not corrected by 0.5.

Plaice taken south of Langeland.

nd March—April 1922.

Skovlvaad																						Fishing-gear
25. VI. 21			26. VI. 21			June 1921			1. VII. 21			2. VII. 21			8. VII. 21			8. VII. 21			8. VII. 21			Date of capture
5 miles SE of Gulstav			5 miles SW of Gulstav						6 miles SW of Gulstav			7 miles SW of Gulstav			6 miles SW of Gulstav			7 miles SW of Gulstav			6 miles S of Gulstav			Fishing-place
23			22						23			23			23			23			23			Depth in m
9			9						9			9			9			9			9			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
						Total																		Length cm
1	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 24
..	..	..	..	..	..	4	1	5	1	..	1	1	..	1	3	..	3	1	..	1	..	..	..	 25
..	1	1	2	2	4	18	7	25	2	..	2	2	..	2	2	1	3	..	..	..	..	..	..	 26
1	..	1	..	1	1	16	11	27	3	..	3	2	..	2	1	..	1	2	..	2	..	..	..	 27
..	..	..	..	1	1	18	14	32	3	1	4	1	..	1	2	3	5	3	2	5	3	1	4	 28
3	2	5	..	3	3	49	26	75	3	..	3	3	..	3	6	3	9	4	2	6	2	3	5	 29
5	5	10	2	1	3	44	62	106	3	1	4	4	3	7	2	3	5	4	3	7	7	1	8	 30
2	5	7	6	2	8	61	49	110	3	5	8	7	6	13	5	9	14	5	3	8	3	5	8	 31
3	12	15	7	6	13	67	80	147	4	7	11	10	8	18	3	8	11	3	4	7	3	1	4	 32
5	8	13	10	7	17	74	106	180	12	7	19	11	5	16	6	10	16	5	4	9	..	9	9	 33
2	11	13	4	10	14	51	105	156	3	12	15	6	10	16	2	12	14	6	13	19	6	12	18	 34
10	10	20	6	11	17	35	123	158	1	16	17	2	15	17	5	14	19	2	14	16	..	12	12	 35
3	16	19	1	6	7	20	91	111	2	14	16	1	8	9	3	15	18	6	17	23	3	13	16	 36
2	13	15	1	13	14	11	96	107	..	9	9	1	17	18	..	12	12	..	15	15	1	10	11	 37
..	9	9	2	12	14	4	93	97	..	8	8	..	5	5	1	9	10	..	11	11	..	9	9	 38
..	3	3	..	9	9	3	60	63	..	8	8	..	2	2	..	7	7	..	7	7	..	3	3	 39
..	2	2	..	1	1	1	30	31	..	2	2	..	1	1	..	6	6	..	2	2	..	3	3	 40
..	1	1	..	2	2	..	15	15	..	2	2	..	..	..	..	3	3	..	..	..	1	1	2	 41
..	..	..	..	..	..	..	8	8	..	4	4	..	..	..	..	1	1	..	..	..	..	..	..	 42
..	..	..	..	..	..	..	3	3	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	 43
..	..	..	..	1	1	..	6	6	..	1	1	..	2	2	..	..	..	..	..	..	..	..	..	 44
..	1	1	..	1	1	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 45
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 46
37	99	136	41	89	130	477	989	1466	40	98	138	51	82	133	41	117	158	41	97	138	29	83	112	Total number
2.73	34.78	34.22	32.85	35.38	34.58	31.74	34.72	33.75	31.13	35.78	34.43	31.63	35.06	33.74	31.27	35.02	34.04	31.83	35.33	34.29	32.10	35.12	34.34	Average length[1] cm

Skovlvaad																						Fishing-gear
10. VII. 21			11. VII. 21			11. VII. 21			11. VII. 21			11. VII. 21			16. VII. 21			18. VII. 21			18. VII. 21			Date of capture
8 miles S of Gulstav			2 miles S of Kjelds Nor			2 miles S of Kjelds Nor			6 miles SW of Gulstav			7 miles SW of Gulstav			6 miles SSE of Gulstav			7 miles SSE of Gulstav			SE of Gulstav			Fishing-place
23			15			15			23			23			23			23			23			Depth in m
9			9.5			9.5			9			9			9			9.25			9.25			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																								Length cm
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 24
1	..	1	..	..	..	1	..	1	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	 25
1	1	2	2	..	2	1	..	1	1	..	1	2	..	2	..	..	..	1	..	1	1	..	1	 26
1	..	1	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	1	1	2	1	1	2	 27
..	1	1	..	..	..	2	..	2	3	2	5	2	..	2	2	..	2	..	..	..	3	1	4	 28
1	1	2	1	1	2	5	..	5	1	..	1	2	..	2	1	..	1	1	1	2	3	..	3	 29
5	1	6	1	3	4	3	..	3	2	1	3	3	1	4	1	2	3	3	1	4	3	4	7	 30
5	2	7	4	..	4	2	3	5	3	2	5	5	1	6	4	2	6	7	6	13	5	5	10	 31
7	3	10	..	1	1	7	3	10	4	5	9	6	1	7	4	7	11	7	9	16	8	2	10	 32
7	2	9	3	2	5	5	5	10	3	2	5	4	3	7	9	4	13	9	9	18	9	5	14	 33
2	5	7	4	5	9	3	2	5	2	5	7	5	7	12	1	4	5	7	8	15	5	9	14	 34
..	7	7	2	6	8	2	10	12	..	6	6	..	4	4	2	16	18	2	13	15	5	14	19	 35
3	11	14	2	4	6	2	6	8	2	7	9	..	8	8	3	13	16	3	15	18	1	18	19	 36
..	11	11	..	10	10	..	14	14	..	5	5	..	5	5	..	11	11	1	14	15	1	16	17	 37
..	3	3	..	5	5	..	9	9	1	7	8	1	10	11	1	14	15	..	15	15	..	20	20	 38
1	8	9	..	6	6	..	2	2	..	9	9	..	6	6	1	7	8	..	13	13	..	12	12	 39
1	4	5	..	4	4	..	3	3	..	4	4	..	1	1	..	11	11	..	7	7	..	9	9	 40
..	..	..	..	1	1	..	3	3	..	1	1	..	1	1	..	5	5	..	7	7	..	4	4	 41
..	1	1	..	1	1	..	1	1	..	1	1	..	..	..	..	3	3	..	2	2	..	3	3	 42
..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	2	..	1	1	..	..	..	 43
..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	 44
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	 45
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	 46
35	61	96	19	50	69	33	61	94	23	58	81	33	48	81	29	102	131	42	125	167	45	123	168	Total number
2.06	35.79	34.43	32.21	36.44	35.28	31.42	36.25	34.55	31.48	36.10	34.79	30.91	36.21	34.05	32.86	36.81	35.94	32.45	36.39	35.40	32.00	36.37	35.20	Average length[1] cm

Fishing-gear	Skovlvaad																											
Date of capture	19. VII. 21			20. VII. 21			27. VII. 21			31. VII. 21			July 1921			2. VIII. 21			3. VIII. 21			3. VIII. 21			4. VIII. 21		
Fishing-place	2 miles S of Kjelds Nor			6 miles SW of Gulstav			SSE of Gulstav			3 miles S of Kjelds Nor						8 miles S of Gulstav			6 miles SW of Gulstav			6 miles SW of Gulstav			5 miles S of Gulstav		
Depth in m	13			23			23			15						22			23			23			23		
Weight pro score in kg	9.5			9			9			9						8			9			8			8		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+
Length cm													Total														
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1
25	..	1	1	3	..	3	..	..	..	2	..	2	15	4	19	..	..	..	..	..	..	1	..	1	1	..	1
26	1	..	1	2	1	3	1	1	2	3	1	4	35	9	44	..	2	2	..	..	..	2	1	3	4	..	4
27	2	..	2	3	..	3	..	..	..	2	..	2	32	5	37	..	2	2	..	..	..	3	1	4	2	1	3
28	..	1	1	2	1	3	3	1	4	4	3	7	44	24	68	..	2	2	2	2	4	2	5	7	3	1	4
29	4	..	4	1	4	5	4	2	6	7	3	10	66	27	93	1	..	1	1	3	4	5	2	7	7	7	14
30	6	..	6	9	3	12	8	1	9	6	3	9	101	43	144	..	..	..	2	..	2	6	4	10	4	1	5
31	3	1	4	5	1	6	6	1	7	4	4	8	118	81	199	3	2	5	3	2	5	10	5	15	8	3	11
32	8	..	8	4	10	14	4	3	7	11	6	17	136	116	252	4	3	7	1	2	3	12	8	20	6	6	12
33	3	10	13	7	7	14	6	6	12	3	4	7	152	146	298	2	5	7	7	6	13	7	11	18	5	7	12
34	6	17	23	6	12	18	5	6	11	5	9	14	106	224	330	4	5	9	1	12	13	6	8	14	5	10	15
35	5	17	22	3	12	15	3	11	14	3	13	16	63	281	344	1	10	11	5	14	19	4	9	13	3	10	13
36	..	17	17	1	19	20	3	15	18	2	17	19	51	333	384	1	15	16	4	13	17	3	16	19	2	17	19
37	1	11	12	2	17	19	..	15	15	1	18	19	14	315	329	1	23	24	3	18	21	..	7	7	2	14	16
38	..	16	16	2	13	15	..	12	12	..	18	18	7	245	252	..	20	20	..	26	26	..	10	10	1	12	13
39	..	13	13	..	5	5	..	8	8	..	7	7	3	174	177	..	16	16	..	22	22	1	3	4	..	16	16
40	1	9	10	..	5	5	..	6	6	..	3	3	3	115	118	..	4	4	..	7	7	..	3	3	..	6	6
41	..	4	4	..	7	7	..	4	4	..	8	8	1	67	68	..	5	5	..	4	4	..	4	4	..	1	1
42	..	1	1	..	2	2	..	1	1	..	1	1	1	31	32	..	7	7	..	3	3	..	2	2	..	..	..
43	..	1	1	..	1	1	..	..	..	..	..	..	..	14	14	..	1	1	..	4	4	..	..	..	..	..	..
44	..	..	..	..	..	..	..	..	..	..	..	..	..	7	7	..	1	1	..	..	..	..	..	..	..	..	..
45	..	..	..	..	..	..	..	..	..	..	1	1	..	5	5	..	..	..	..	..	..	..	1	1	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Total number	40	119	159	51	121[2]	172[2]	43	93	136	53	119	172	951	2268[2]	3219[2]	17	123	140	29	139	168	62	100	162	54	112	166
Average length[1] cm	32.00	36.39	35.28	31.27	35.86	34.50	31.65	36.18	34.75	30.87	35 85	34.31	31.75	35.86	34.64	32.94	36.80	36.33	33.28	36.94	36.30	31.53	34.77	33.53	31.07	35.58	34.

Fishing-gear	Gillnet																											
Date of capture	5. VII. 21			5. VII. 21			5. VII. 21			5. VII. 21			5. VII. 21			6. VII. 21			6. VII. 21			12. VII. 21			12. VII. 21		
Fishing-place	WSW of Bagenkop			W of Bagenkop			WSW of Bagenkop			W of Bagenkop			W of Bagenkop			6 miles SE of Gulstav			8 miles SSE of Gulstav			6 miles SW of Bagenkop			8 miles WSW of Bagenkop		
Depth in m	23			23			22			21			21			21			23			23			23		
Weight pro score in kg	9.5			9.5			9			9			9			9.5			10			9.5			9.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+
Length cm																											
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..
25	..	..	..	..	1	1	..	1	1	2	..	2	..	..	..	..	..	..	..	..	..	2	..	2	2	..	..
26	1	1	2	3	1	4	2	..	2	..	1	1	1	..	1	1	..	1	2	..	2	..	..	..	1	..	..
27	2	..	2	2	2	4	3	1	4	1	2	3	2	1	3	2	..	2	2	..	2	..	..	..	1	..	..
28	4	1	5	3	..	3	4	1	5	6	4	10	..	..	..	6	2	8	..	2	2	3	3	6	1	2	..
29	1	1	2	6	3	9	5	2	7	1	5	6	..	..	..	2	1	3	4	..	4	3	3	6	3	1	..
30	1	3	4	4	3	7	6	4	10	7	1	8	5	3	8	2	2	4	..	..	..	2	1	3	6	1	..
31	7	5	12	6	12	18	6	2	8	6	6	12	5	3	8	5	2	7	4	2	6	5	5	10	14	3	1
32	6	4	10	15	9	24	10	9	19	7	4	11	4	5	9	5	4	9	10	4	14	9	5	14	12	3	1
33	7	5	12	9	8	17	7	11	18	6	12	18	6	11	17	13	14	27	7	6	13	5	7	12	11	11	2
34	6	10	16	6	10	16	4	11	15	9	14	23	4	7	11	10	16	26	4	10	14	13	7	20	6	6	1
35	5	19	24	7	11	18	4	20	24	4	17	21	2	9	11	4	12	16	4	7	11	3	10	13	2	15	1
36	2	18	20	2	18	20	1	16	17	1	14	15	1	15	16	1	14	15	2	14	16	2	14	16	4	13	1
37	2	12	14	2	17	19	1	11	12	2	19	21	..	9	9	1	9	10	..	7	7	..	17	17	..	18	1
38	..	15	15	1	11	12	1	13	14	1	13	14	..	8	8	..	20	20	..	2	2	1	14	15	..	10	1
39	1	14	15	..	10	10	..	3	3	..	10	10	..	2	2	..	9	9	..	3	3	..	9	9	..	15	1
40	..	5	5	..	4	4	..	4	4	..	2	2	..	5	5	..	9	9	..	2	2	..	4	4	..	10	1
41	..	2	2	..	5	5	..	1	1	..	3	3	..	2	2	..	3	3	..	1	1	..	3	3	..	7	
42	..	3	3	..	4	4	..	1	1	..	3	3	..	..	..	..	2	2	..	2	2	..	2	2	..	1	
43	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..
44	..	1	1	..	1	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	45	120[4]	165[4]	66	130	196	54	112	166	53	131	184	30	80	110	52	120	172	39	62	101	48	107[4]	155[4]	63	116	17
Average length[1] cm	32.33	36.12	35.08	31.91	35.33	34.18	31.37	35.05	33.86	31.81	35.20	34.22	31.77	35.29	34.33	31.98	35.83	34.67	31.92	35.32	34.01	32.21	36.00	34.83	31.70	36.41	34

[1] Not corrected by 0.5. [2] 53 cm: 1 spec. [3] 50 cm: 1 spec. [4] 48 cm: 1 spec.

Skovlvaad																									Fishing-gear
4. VIII. 21			4. VIII. 21			28. VIII. 21			29. VIII. 21			30. VIII. 21			30. VIII. 21			31. VIII.21			31. VIII. 21			August 1921			Date of capture
7 miles SW of Gulstav			6 miles SW of Gulstav			7 miles SW of Gulstav			8 miles SW of Gulstav			6 miles WSW of Gulstav			7 miles WSW of Gulstav			6 miles SW of Gulstav			7 miles SW of Gulstav						Fishing-place
23			23			23			23			23			23			23			23						Depth in m
8			8			6.5			6			6.5			7			7			6.5						Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																								Total			Length cm
.	..	..	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..	2	..	2	 22
.	..	..	..	..	..	..	..	..	1	..	1	..	1	1	..	..	..	2	1	3	1	1	2	4	3	7	 23
.	..	..	..	..	..	3	..	3	..	1	1	1	2	3	2	..	2	2	1	3	..	2	2	9	6	15	 24
1	..	1	1	..	1	..	2	2	2	2	4	3	1	4	3	2	5	..	3	3	2	2	4	14	12	26	 25
6	2	8	1	2	3	9	5	14	7	6	13	3	3	6	6	3	9	6	2	8	5	1	6	49	27	76	 26
4	2	6	2	3	5	3	6	9	12	11	23	5	6	11	6	4	10	4	8	12	3	5	8	44	49	93	 27
6	..	6	1	1	2	7	9	16	10	9	19	7	8	15	7	4	11	10	11	21	11	7	18	66	59	125	 28
6	1	7	3	2	5	9	12	21	6	9	15	5	10	15	10	7	17	8	14	22	6	13	19	67	80	147	 29
2	1	13	1	..	1	10	13	23	13	16	29	11	7	18	3	13	16	9	9	18	5	10	15	76	74	150	 30
4	..	4	4	2	6	8	13	21	6	12	18	4	11	15	5	5	10	8	13	21	7	9	16	70	77	147	 31
8	7	15	8	2	10	10	5	15	7	14	21	3	7	10	6	6	12	9	15	24	5	12	17	79	87	166	 32
5	9	14	9	8	17	5	19	24	5	15	20	6	6	12	2	6	8	6	6	12	6	7	13	65	105	170	 33
7	9	16	4	11	15	2	12	14	7	9	16	2	6	8	1	6	7	5	8	13	4	6	10	48	102	150	 34
6	9	15	8	6	14	2	8	10	2	9	11	..	6	6	..	5	5	4	8	12	2	8	10	37	102	139	 35
1	12	13	1	6	7	2	8	10	4	13	17	..	3	3	1	3	4	1	6	7	2	3	5	22	115	137	 36
.	20	20	1	12	13	..	4	4	2	10	12	1	..	1	..	2	2	1	4	5	1	3	4	12	117	129	 37
.	9	9	..	5	5	1	3	4	..	6	6	1	1	2	..	4	4	..	3	3	..	1	1	3	100	103	 38
.	7	7	..	6	6	..	3	3	..	3	3	..	3	3	..	2	2	..	1	1	..	1	1	1	83	84	 39
.	5	5	..	5	5	..	2	2	..	2	2	..	2	2	..	1	1	..	1	1	..	1	1	..	39	39	 40
.	2	2	..	2	2	..	1	1	..	2	2	..	..	..	..	..	..	1	..	1	..	..	..	1	21	22	 41
.	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15	15	 42
.	1	1	..	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	9	 43
.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	 44
.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	 45
.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 46
.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	 47
66	97[3]	163[3]	44	78	122	71	126	197	85	149	234	53	83	136	52	73	125	76	114	190	60	92	152	669	1286[3]	1955[3]	Total number
.61	35.76	33.67	32.18	35.53	34.32	29.93	32.07	31.30	29.95	32.22	31.40	29.55	31.08	30.49	28.85	31.74	30.54	30.24	31.26	30.85	30.10	31.18	30.76	30.55	33.85	32.72	Average length[1] cm

Gillnet																									Fishing-gear
12. VII. 21			12. VII. 21			13. VII. 21			13 VII. 21			13. VII. 21			15. VII. 21			15. VII. 21			16. VII. 21			16. VII. 21			Date of capture
7 miles WSW of Bagenkop			8 miles W of Bagenkop			8 miles SW of Bagenkop			8 miles W of Bagenkop			8 miles W of Bagenkop			8 miles W of Bagenkop			8 miles W of Bagenkop			8 miles SSE of Gulstav			8 miles SSW of Gulstav			Fishing-place
23			23			23			23			23			23			23			23			23			Depth in m
9.5			9.5			9			9.5			9			9			9.25			9.5			9.25			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																											Length cm
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 24
2	..	2	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 25
1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	 26
3	..	3	2	..	2	..	..	..	1	..	1	1	..	1	1	..	1	..	..	..	1	..	1	..	..	..	 27
.	..	..	2	1	3	1	..	1	..	1	1	..	3	3	1	..	1	..	..	..	..	..	..	..	1	1	 28
2	..	2	4	1	5	2	1	3	..	..	..	1	..	1	2	2	4	3	1	4	1	..	1	1	..	1	 29
2	1	3	4	..	4	..	3	3	2	..	2	..	..	..	..	..	..	..	1	1	..	3	3	5	..	5	 30
3	..	3	2	..	2	..	3	3	1	2	3	2	1	3	2	1	3	1	2	3	..	..	..	3	..	3	 31
4	4	8	7	2	9	..	1	1	6	4	10	2	1	3	2	2	4	5	..	5	2	4	6	6	6	12	 32
6	6	12	4	..	4	1	2	3	..	5	5	2	1	3	2	3	5	3	5	8	3	10	13	8	5	13	 33
4	6	10	4	11	15	2	5	7	2	4	6	2	12	14	3	4	7	7	4	11	2	7	9	7	6	13	 34
3	16	19	2	11	13	1	6	7	2	12	14	..	8	8	..	7	7	4	2	6	4	6	10	3	14	17	 35
3	16	19	1	3	4	2	6	8	1	10	11	2	14	16	1	7	8	4	18	22	2	14	16	..	16	16	 36
..	11	11	..	10	10	..	15	15	2	12	14	2	8	10	1	2	3	1	13	14	2	16	18	..	14	14	 37
1	15	16	..	5	5	..	11	11	..	9	9	2	11	13	..	12	12	..	17	17	..	28	28	1	18	19	 38
.	5	5	..	3	3	..	5	5	..	5	5	..	6	6	..	4	4	..	10	10	..	11	11	1	11	12	 39
.	5	5	..	7	7	..	2	2	..	2	2	..	4	4	..	5	5	..	2	2	..	10	10	..	8	8	 40
.	1	1	..	3	3	..	5	5	..	4	4	..	1	1	..	..	..	..	2	2	..	3	3	..	5	5	 41
.	1	1	..	1	1	..	3	3	..	2	2	..	1	1	..	1	1	..	2	2	..	2	2	..	1	1	 42
.	..	..	..	..	..	..	1	1	..	..	..	..	2	2	..	1	1	..	..	..	..	1	1	..	2	2	 43
.	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	 44
.	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 45
.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	 46
34	88	122	33	58	91	9	70	79	17	73	90	16	73	89	15	51	66	28	79	107	18	118	136	35	108	143	Total number
.79	36.10	31.90	31.24	36.38	31.52	32.67	36.76	36.29	32.82	36.33	35.67	33.63	36.29	35.81	32.00	36.39	35.39	33.43	36.75	35.88	33.28	37.04	36.51	32.80	36.88	35.88	Average length[1] cm

Fishing-gear	Gillnet																							
Date of capture	18. VII. 21			20. VII. 21			22. VII. 21			22. VII. 21			27. VII. 21			31. VII 21			July 1921			2. VIII. 21		
Fishing-place	8 miles S of Gulstav			7 miles SW of Bagenkop			8 miles S of Gulstav			2 miles S of Kjelds Nor			8 miles S of Gulstav			8 miles S of Gulstav						6 miles SSE of Gulstav		
Depth in m	23			23			23			15			23			23						23		
Weight pro score in kg	9.5			9			9.25			9.25			9.25			9.5						8.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+
Length cm																			Total					
24	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	1	2	..	..	..
25	..	1	1	..	..	..	1	..	1	..	..	..	1	..	1	..	..	..	11	3	14	..	..	..
26	2	..	2	1	..	1	1	..	1	..	..	..	..	3	3	..	..	..	17	7	24	..	..	..
27	..	1	1	..	..	..	2	1	3	..	..	..	3	1	4	..	..	..	29	9	38	1	..	1
28	1	..	1	1	..	1	1	..	1	2	1	3	3	1	4	3	..	3	42	23	65	..	..	..
29	3	..	3	8	1	9	3	1	4	6	..	6	5	3	8	8	3	11	74	29	103	..	4	4
30	3	..	3	4	1	5	3	..	3	5	..	5	2	1	3	3	1	4	66	29	95	1	..	1
31	5	6	11	5	2	7	2	6	8	4	1	5	11	5	16	5	5	10	104	74	178	1	2	3
32	8	8	16	9	5	14	12	5	17	7	6	13	10	2	12	7	4	11	165	101	266	4	4	8
33	9	8	17	3	5	8	5	17	22	6	9	15	2	7	9	6	15	21	131	183	314	6	5	11
34	4	10	14	1	7	8	6	10	16	2	5	7	7	3	10	10	14	24	125	199	324	2	9	11
35	4	12	16	5	13	18	4	18	22	2	5	7	5	10	15	2	9	11	76	269	345	3	11	14
36	5	22	27	1	9	10	3	17	20	2	9	11	1	16	17	2	17	19	46	330	376	1	16	17
37	..	22	22	..	17	17	2	11	13	..	9	9	..	12	12	1	15	16	19	306	325	..	28	28
38	..	23	23	..	11	11	..	6	6	..	10	10	..	8	8	..	17	17	8	307	315	..	21	21
39	1	22	23	..	10	10	..	13	13	..	2	2	..	15	15	..	14	14	3	211	214	..	16	16
40	..	11	11	..	1	1	..	2	2	..	2	2	..	5	5	..	6	6	..	117	117	..	7	7
41	..	8	8	..	2	2	..	3	3	..	3	3	1	3	4	..	6	6	1	76	77	..	7	7
42	..	2	2	..	1	1	..	1	1	..	1	1	..	1	1	..	1	1	..	39	39	..	6	6
43	..	4	4	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	16	16	..	2	2
44	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	8	..	..	..
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..
47	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..
48	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	3	3	..	..	..
49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
51	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	45	163	208	38	85	123	46	111	157	36	63	99	51	98	149	47	128	175	918	2344	3262	19	138	15
Average length[1] cm	32.44	36.90	35.94	31.39	36.05	34.61	31.98	35.42	34.41	31.56	35.76	34.23	31.61	35.89	34.42	31.96	36.06	34.96	32.01	36.06	34.92	32.79	36.96	36.

Fishing-gear	Gillnet																							
Date of capture	10. VIII. 21			10. VIII. 21			14. VIII. 21			14. VIII. 21			16. VIII. 21			16. VIII. 21			17. VIII. 21			20. VIII. 21		
Fishing-place	7 miles SW of Gulstav			S of Gulstav			7 miles WSW of Bagenkop			8 miles SW of Bagenkop			8 miles SE of Gulstav			8 miles SE of Kjelds Nor			9 miles SE of Gulstav			9 miles S of Gulstav		
Depth in m	21			21			21			21			19			19			18			19		
Weight pro score in kg	9			9			8.5			8.25			9			9			9			9		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂
Length cm																								
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..
26	..	..	..	..	..	..	4	..	4	1	..	1	..	1	1	..	..	..	..	..	..	1	..	..
27	2	1	3	3	..	3	..	..	..	3	4	7	..	..	..	1	..	1	..	..	..	1	1	..
28	1	..	1	2	..	2	4	..	4	6	..	6	4	1	5	1	1	2	2	..	2	1	..	..
29	1	1	2	1	..	1	3	..	3	5	..	5	1	2	3	1	..	1	3	2	5	..	4	..
30	6	1	7	3	..	3	3	..	3	3	1	4	3	4	7	6	2	8	1	2	3	4	1	..
31	2	3	5	..	4	4	7	1	8	3	1	4	3	6	9	2	3	5	4	6	10	3	5	..
32	5	2	7	1	1	2	5	1	6	6	5	11	8	6	14	5	3	8	4	3	7	6	5	1
33	6	7	13	3	5	8	6	2	8	5	5	10	11	10	21	8	5	13	5	14	19	4	11	1
34	1	8	9	3	13	16	3	3	6	9	8	17	5	6	11	4	11	15	5	9	14	7	9	1
35	..	11	11	1	13	14	..	4	4	4	21	25	..	10	10	2	19	21	..	12	12	3	7	1
36	..	16	16	..	13	13	3	10	13	1	7	8	..	20	20	4	18	22	3	17	20	2	13	..
37	..	8	8	..	13	13	..	12	12	1	12	13	1	20	21	..	21	21	2	22	24	2	13	..
38	..	20	20	1	10	11	..	11	11	..	14	14	1	21	22	..	24	24	1	23	24	..	8	..
39	..	7	7	..	6	6	..	5	5	..	8	8	..	7	7	..	10	10	..	10	10	1	10	..
40	..	5	5	1	3	4	..	4	4	..	7	7	..	11	11	..	9	9	..	12	12	..	7	..
41	..	3	3	..	3	3	1	3	4	..	2	2	..	7	7	..	8	8	..	7	7	..	3	..
42	..	1	1	..	..	..	..	2	2	..	1	1	..	5	5	..	3	3	..	5	5	..	2	..
43	..	1	1	..	1	1	..	3	3	..	1	1	..	..	..	..	2	2	..	5	5	..	4	..
44	..	..	..	..	..	..	..	..	..	..	1	1	..	3	3	..	..	..	..	2	2	..	1	..
45	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	24	95	119	19	86	105	39	61	100	47	99	146	37	140	177	34	140	174	30	151	181	35	104	1
Average length[1] cm	31.01	36.25	35.20	31.68	36.19	35.37	31.26	37.44	35.03	31.47	35.93	34.49	32.11	36.39	35.49	32.35	36.66	35.82	32.67	36.81	36.12	32.74	36.04	3

[1] Not corrected by 0.5. [2] 47 cm: 1 spec.

Fishing-gear	Gillnet																						
Date of capture	5. VIII. 21			5. VIII. 21			6. VIII. 21			7. VIII. 21			7. VIII. 21			8. VIII. 21			8. VIII. 21			10. VIII. 21		
Fishing-place	8 miles WSW of Bagenkop			5 miles SW of Gulstav			5 miles SSW of Gulstav			7 miles SE of Gulstav			2 miles off Kjelds Nor Light			8 miles SE of Gulstav			7 miles SSE of Gulstav			7 miles W of Bagenkop		
Depth in m	23			19			19			21			13			20			21			21		
Weight pro score in kg	9			8.5			9			9			9.25			9			9			8.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																								
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
27	..	..	..	..	..	..	..	..	..	1	..	1	2	1	3	..	1	1	..	..	..	3	..	3
28	..	1	1	..	..	..	..	..	..	2	1	3	1	..	1	..	..	..	..	..	..	1	1	2
29	..	1	1	..	..	..	..	..	..	1	1	2	2	3	5	1	1	2	1	1	2	3	1	4
30	..	..	..	..	2	2	1	1	2	7	2	9	..	..	..	7	5	12	2	..	2	3	..	3
31	4	2	6	..	..	..	4	..	4	1	2	3	5	3	8	3	9	12	2	3	5	4	1	5
32	..	2	2	3	1	4	1	2	3	6	6	12	8	8	16	5	7	12	3	6	9	8	6	14
33	3	4	7	..	3	3	4	4	8	5	7	12	5	5	10	7	9	16	5	9	14	1	5	6
34	4	6	10	1	7	8	3	4	7	4	16	20	4	6	10	1	8	9	3	8	11	4	10	14
35	4	8	12	2	8	10	6	10	16	2	14	16	1	8	9	4	11	15	3	10	13	5	14	19
36	3	14	17	2	7	9	1	10	11	2	7	9	2	17	19	1	12	13	3	15	18	2	11	13
37	1	17	18	1	12	13	2	20	22	1	19	20	2	19	21	1	8	9	1	12	13	1	6	7
38	1	19	20	..	14	14	2	7	9	1	16	17	..	12	12	..	11	11	..	8	8	..	4	4
39	..	17	17	..	14	14	..	8	8	2	4	6	1	8	9	..	13	13	..	7	7	..	4	4
40	..	10	10	..	9	9	..	6	6	..	3	3	..	5	5	..	5	5	1	4	5	..	5	5
41	..	5	5	..	9	9	..	9	9	..	..	..	..	3	3	..	4	4	..	3	3	..	2	2
42	..	4	4	..	1	1	..	1	1	..	1	1	..	1	1	..	1	1	..	3	3	..	..	..
43	..	2	2	..	1	1	..	3	3	..	2	2	..	1	1	..	1	1	..	..	..	..	2	2
44	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
45	..	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
46	..	1	1	..	..	..	..	1	1	..	1	1	..	1	1	..	..	..	..	..	..	..	1	1
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
50	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
51	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Total number	20	117	137	10	89	99	24	86	110	35	104	139	33	101	134	30	106	136	24	89	113	35	74	109
Average length[1] cm	34.10	37.61	37.09	33.50	37.55	37.14	34.00	37.40	36.65	32.60	35.83	35.01	32.48	36.13	35.23	32.33	35.52	34.82	33.50	35.99	35.46	31.97	35.69	34.50

Fishing-gear	Gillnet																						
Date of capture	20. VIII. 21			20. VIII. 21			22. VIII. 21			22. VIII. 21			23. VIII. 21			26. VIII. 21			26. VIII. 21			27. VIII. 21		
Fishing-place	7 miles S of Kjelds Nor			8 miles S of Gulstav			8 miles S of Gulstav			6 miles SE of Kjelds Nor			9 miles S of Gulstav			9 miles S of Gulstav			6 miles SE of Kjelds Nor			5 miles S of Gulstav		
Depth in m	19			21			23			21			21			21			21			21		
Weight pro score in kg	9			9			9			9			9			9			9			8.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																								
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	1	2	..	2	..	..	..
26	1	..	1	1	..	1	1	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1
27	1	1	2	..	1	1	1	..	1	..	1	1	1	..	1	..	..	..	..	..	..	2	1	3
28	..	3	3	3	1	4	2	5	7	2	1	3	1	..	1	2	..	2	2	3	5	4	1	5
29	2	3	5	5	2	7	1	7	8	3	6	9	3	..	3	6	3	9	2	..	2	6	7	13
30	3	3	6	3	3	6	2	7	9	2	4	6	4	6	10	7	3	10	4	5	9	8	5	13
31	5	11	16	4	6	10	1	4	5	1	2	3	4	3	7	10	7	17	5	11	16	11	7	18
32	2	5	7	3	5	8	8	8	16	9	8	17	6	8	14	6	7	13	13	5	18	8	8	16
33	2	15	17	2	11	13	3	8	11	7	11	18	12	18	30	13	12	25	4	5	9	16	13	29
34	3	17	20	3	5	8	6	11	17	3	13	16	4	13	17	11	18	20	9	15	24	5	13	18
35	2	12	14	1	14	15	5	11	16	7	13	20	10	16	26	6	7	13	5	17	22	6	14	20
36	..	7	7	1	12	13	2	14	16	4	17	21	1	13	14	2	21	23	1	12	13	6	17	23
37	..	5	5	..	9	9	..	10	10	1	16	17	..	16	16	..	14	14	..	7	7	3	14	17
38	1	9	10	..	10	10	..	8	8	..	22	22	1	19	20	..	18	18	..	11	11	2	19	21
39	..	11	11	..	2	2	..	5	5	..	8	8	..	14	14	..	15	15	..	13	13	..	17	17
40	..	4	4	..	2	2	..	7	7	..	3	3	..	11	11	..	7	7	..	5	5	..	4	4
41	..	3	3	..	3	3	..	5	5	..	3	3	..	5	5	..	4	4	..	5	5	..	4	4
42	..	2	2	..	1	1	..	5	5	..	1	1	..	1	1	..	3	3	..	1	1	..	4	4
43	..	..	..	..	1	1	..	2	2	..	1	1	..	..	..	..	1	1	..	1	1	..	1	1
44	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	22	111	133	26	89	115	32	118[2]	150[2]	39	130	169	48	144	192	63	142	205	47	116	163	77	150	227
Average length[1] cm	31.64	34.75	34.23	30.92	35.13	34.18	32.34	35.23	34.61	32.85	35.44	34.84	32.48	35.89	35.03	32.17	35.89	34.75	32.00	35.44	34.45	32.31	35.45	34.39

Fishing-gear	Gillnet									Skovlvaad															
Date of capture	27. VIII. 21			28. VIII. 21			August 1921			3. I. 22			6. I. 22			6. I. 22			7. I. 22			7. I. 22			7. I. 22		
Fishing-place	6 miles SSE of Gulstav			9 miles S of Gulstav						8 miles W of Bagenkop			7 miles WSW of Bagenkop			7 miles SW of Bagenkop			8 miles SW of Bagenkop			9 miles W of Bagenkop			9 miles W of Bagenkop		
Depth in m	21			21						23			23			23			23			24			24		
Weight pro score in kg	9			9						8.5			8.25			8.5			8.5			8.5			8.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂
Length cm							Total																				
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	
24										1	..	1	1	..	1	..	2	2	..	..	..	1	..	1	2	..	
25	..	..	..	..	..	..	3	3	6	2	..	2	1	..	1	1	1	2	2	..	2	2	..	2	1	..	
26	..	1	1	..	..	..	10	6	16	1	1	2	4	..	4	8	..	8	5	..	5	1	1	2	3	..	
27	1	..	1	..	..	..	23	11	34	2	..	2	2	1	3	8	1	9	3	1	4	3	1	4	7	..	
28	..	..	..	3	2	5	44	21	65	5	..	5	6	1	7	7	2	9	5	..	5	6	2	8	4	..	
29	3	..	3	6	..	6	60	48	108	9	4	13	15	2	17	9	2	11	12	1	13	7	5	12	6	..	
30	7	4	11	3	2	5	93	62	155	14	1	15	11	3	14	6	2	8	5	3	8	6	2	8	11	1	1
31	7	4	11	3	3	6	99	106	205	7	5	12	10	2	12	10	1	11	8	4	12	3	3	6	9	4	1
32	6	10	16	9	3	12	148	133	281	8	1	9	12	2	14	6	7	13	9	7	16	9	6	15	5	2	
33	4	10	14	10	3	13	157	209	366	9	2	11	11	1	12	10	4	14	8	3	11	11	5	16	6	1	
34	7	9	16	2	6	8	116	263	379	3	3	6	6	5	11	5	8	13	5	6	11	6	5	11	6	6	1
35	6	12	18	5	10	15	93	306	399	11	1	12	3	6	9	7	5	12	4	6	10	8	13	21	2	6	
36	4	9	13	..	4	4	51	333	384	6	..	6	2	5	7	4	8	12	2	11	13	1	20	21	2	11	1
37	1	12	13	2	8	10	23	355	378	1	7	8	1	8	9	7	8	15	..	11	11	3	10	13	..	11	1
38	1	15	16	1	7	8	13	361	374	2	4	6	1	5	6	3	7	10	1	7	8	..	11	11	1	13	1
39	..	9	9	..	6	6	4	247	251	5	2	7	1	7	8	..	19	19	1	6	7	1	8	9		7	
40	..	3	3	..	5	5	2	158	160	..	6	6	..	7	7	..	10	10	..	15	15	..	9	9	..	11	1
41	..	3	3	..	1	1	1	111	112	..	2	2	..	2	2	..	5	5	..	4	4	..	9	9	..	10	1
42	..	1	1	..	1	1	..	56	56	..	3	3	..	4	4	1	6	7	..	3	3	1	3	4	..	9	
43	..	1	1	..	..	..	..	38	38	..	2	2	..	1	1	..	2	2	..	1	1	..	2	2	..	1	
44	..	1	1	..	..	..	..	12	12	..	..	..	..	1	1	..	2	2	..	1	1	..	1	1	..	3	
45	..	..	..	..	..	..	..	4	4	..	..	..	..	4	4	..	1	1	..	1	1	..	2	2	..	3	
46	..	..	..	..	1	1	..	6	6	..	1	1	..	..	..	..	..	..	..	..	..	..	3	3	..	1	
47	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	2	
Total number	47	104	151	44	62	106	940	2851[2]	3791[2]	87[5]	45	132[5]	87	68	155	93	105[4]	198[4]	70	91	161	69	121	190	65	103[3]	16
Average length[1] cm	32.60	35.64	34.70	32.14	35.92	34.35	32.30	36.08	35.14	31.93	36.24	33.40	30.94	37.13	33.66	31.34	36.90	34.29	30.83	36.62	34.10	31.71	36.55	34.79	30.42	38.50	35

Fishing-gear	Skovlvaad																								
Date of capture	15 I. 22			15. I. 22			18. I. 22			18. I. 22			18. I. 22			19. I. 22			19. I. 22			19. I. 22			19. I. 22		
Fishing-place	7 miles WSW of Bagenkop			8 miles SW of Bagenkop			6 miles SW of Gulstav			6 miles W of Gulstav			8 miles W of Bagenkop			8 miles SW of Gulstav			6 miles WSW of Gulstav			6 miles W of Gulstav			4 miles W of Gulstav		
Depth in m	23			23			23			23			23			23			23			23			23		
Weight pro score in kg	8.25			8.25			8.25			8.25			8.5			8.25			8.25			8.25			8		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂
Length cm																											
22	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
23	..	..	..	..	..	..	..	..	..	1	..	1	2	..	2	1	..	1	..	..	..	..	..	..	..	..	
24	..	..	..	1	..	1	2	..	2	1	..	1	1	1	2	1	..	1	2	..	2	..	1	1	3	1	
25	2	..	2	1	..	1	2	..	2	3	..	3	3	..	3	2	..	2	6	..	6	2	..	2	2	..	
26	6	2	8	6	1	7	5	1	6	2	1	3	5	..	5	7	..	7	13	..	13	2	..	2	9	..	
27	8	1	9	6	..	6	5	..	5	8	1	9	4	2	6	10	1	11	11	1	12	15	..	15	11	2	1
28	7	1	8	7	2	9	6	1	7	5	..	5	4	1	5	8	3	11	6	3	9	10	..	10	19	2	2
29	12	2	14	8	4	12	3	2	5	8	1	9	4	2	6	10	2	12	3	2	5	16	3	19	7	..	
30	18	3	21	13	6	19	9	..	9	7	1	8	6	3	9	9	3	12	8	2	10	10	2	12	13	1	1
31	8	1	9	9	4	13	6	..	6	5	1	6	2	4	6	9	2	11	7	3	10	12	3	15	7	1	
32	6	2	8	4	1	5	5	1	6	3	..	3	3	2	5	1	4	5	4	1	5	8	2	10	15	..	1
33	4	2	6	5	2	7	5	1	6	5	..	5	2	2	4	8	2	10	7	1	8	7	1	8	2	4	
34	2	2	4	4	2	6	4	..	4	2	3	5	2	3	5	3	1	4	5	3	8	3	4	7	8	4	1
35	6	3	9	3	3	6	3	..	3	2	1	3	1	2	3	3	3	6	4	2	6	3	3	6	2	5	
36	1	4	5	5	1	6	3	..	3	1	1	2	..	2	2	4	2	6	2	3	5	..	3	3	3	5	
37	..	5	5	..	2	2	1	2	3	1	7	8	..	4	4	..	4	4	..	2	3	..	6	6	1	3	
38	..	6	6	..	5	5	..	2	2	..	2	2	..	2	2	..	7	7	..	3	3	..	2	2	1	3	
39	..	5	5	..	7	7	..	2	2	..	3	3	..	4	4	..	9	9	..	2	2	1	5	6	..	3	
40	..	2	2	..	2	2	..	3	3	..	1	1	..	3	3	..	5	5	..	3	3	..	3	3	..	4	
41	..	3	3	..	1	1	..	3	3	..	2	2	..	2	2	..	3	3	..	5	5	..	1	1	..	1	
42	..	1	1	..	2	2	..	2	2	..	1	1	..	1	1	..	1	1	..	3	3	..	1	1	..	1	
43	..	2	2	..	1	1	..	2	2	..	..	..	..	..	..	..	..	..	..	3	3	..	1	1	..	..	
44	..	1	1	..	1	1	..	1	1	..	..	..	..	2	2	..	1	1	..	1	1	..	..	..	..	1	
45	..	1	1	..	2	2	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	
Total number	80	49	129	72	49	121	60	23	83	55	26	81	39	43	82	76	56[7]	132[7]	78	43	121	89	41	130	103	42[7]	14
Average length[1] cm	29.90	35.94	32.19	30.25	35.27	32.28	30.12	37.48	32.16	29.47	35.85	31.52	28.67	35.09	32.04	29.72	36.41	32.56	29.31	36.21	31.76	29.84	35.34	31.58	29.77	35.57	31

[1] Not corrected by 0.5. [2] 51 cm: 1 spec. [3] 52 cm: 1 spec. [4] 50 cm: 2 spec. [5] 22 cm: 1 spec. [6] 47 cm: 8 spec., 50 cm: 2 spec., 52 cm: 1 spec. [7] 47 cm: 1 spec. [8] 48 cm: 1 s

Skovlvaad																									Fishing-gear
12. I. 22			12. I. 22			13. I. 22			13. I. 22			13. I. 22			14. I. 22			14. I. 22			14. I. 22			15. I. 22			Date of capture
7 miles W of Bagenkop			6 miles SW of Bagenkop			6 miles W of Gulstav			7 miles SW of Gulstav			6 miles W of Gulstav			8 miles W of Bagenkop			7 miles WSW of Bagenkop			8 miles SW of Bagenkop			9 miles W of Bagenkop			Fishing-place
23			23			23			23			23			23			23			23			24			Depth in m
8.25			8.25			8.5			8.25			8.25			8.25			8.25			8.25			8.5			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																											Length cm
..	..	..	1	..	1	..	..	..	1	..	1	2	..	2	..	1	1	..	..	..	1	..	1	..	..	..	 23
1	..	1	..	1	1	1	..	1	1	..	1	2	..	2	3	..	3	..	..	..	1	..	1	1	..	1	 24
2	..	2	2	1	3	2	..	2	2	..	2	2	..	2	2	..	2	2	..	2	2	..	2	3	..	3	 25
2	..	2	6	..	6	3	..	3	7	1	8	12	2	14	11	..	11	7	..	7	7	..	7	6	..	6	 26
4	..	4	5	..	5	4	..	4	8	..	8	9	1	10	8	..	8	5	1	6	6	..	6	4	..	4	 27
6	3	9	12	..	12	9	..	9	3	3	6	9	3	12	4	4	8	8	1	9	6	2	8	7	1	8	 28
5	..	5	7	2	9	6	..	6	7	..	7	8	2	10	7	1	8	6	1	7	6	3	9	6	1	7	 29
4	..	4	10	1	11	6	1	7	13	2	15	5	2	7	7	3	10	9	3	12	10	1	11	6	4	10	 30
9	1	10	8	3	11	8	1	9	8	2	10	3	2	5	5	2	7	12	2	14	5	1	6	3	6	9	 31
5	2	7	12	..	12	6	1	7	6	2	8	4	1	5	2	3	5	8	2	10	5	2	7	3	4	7	 32
10	1	11	4	2	6	7	..	7	3	3	6	3	1	4	3	2	5	7	1	8	2	..	2	3	3	6	 33
6	7	13	5	3	8	7	3	10	5	..	5	3	2	5	1	3	4	1	2	3	1	4	5	1	2	3	 34
5	6	11	5	5	10	2	7	9	5	..	5	1	4	5	2	3	5	1	1	2	..	3	3	..	3	3	 35
3	5	8	5	6	11	2	6	8	2	5	7	..	2	2	1	4	5	1	2	3	..	5	5	..	4	4	 36
..	7	7	1	4	5	..	5	5	2	1	3	1	1	2	..	3	3	..	2	2	..	5	5	..	4	4	 37
3	3	6	..	11	11	..	7	7	..	3	3	1	3	4	1	3	4	..	4	4	..	3	3	..	4	4	 38
1	11	12	..	10	10	1	8	9	..	3	3	1	4	5	..	3	3	..	5	5	..	3	3	..	4	4	 39
..	4	4	..	6	6	..	5	5	1	1	2	..	2	2	..	4	4	..	3	3	..	6	6	..	3	3	 40
..	7	7	..	3	3	..	4	4	..	2	2	..	2	2	..	3	3	1	3	4	..	1	1	..	3	3	 41
..	3	3	..	8	8	..	6	6	..	..	..	..	3	3	..	3	3	..	1	1	..	..	..	..	..	..	 42
..	5	5	..	6	6	..	5	5	..	1	1	..	..	..	..	2	2	..	2	2	..	..	..	..	1	1	 43
..	1	1	..	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	2	 44
..	1	1	..	1	1	..	1	1	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	 45
..	..	..	..	1	1	..	1	1	..	1	1	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..	 46
..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	 47
66	68	134	83	76	159	64	63	127	74	31	105	67[5]	37	104[5]	57	50	107	68	38	106	52	39	91	43	50	93	Total number
31.45	37.74	34.64	30.47	37.91	34.03	30.56	38.60	34.55	30.30	35.45	31.82	28.75	34.68	30.86	28.86	36.08	32.23	30.00	36.58	32.36	28.81	35.54	31.69	28.72	35.64	32.44	Average length[1] cm

Skovlvaad																									Fishing-gear
January 1922			28. III. 22			28. III. 22			29. III. 22			30. III. 22			March 1922			1. IV. 22			1. IV. 22			2. IV. 22			Date of capture
			8 miles SW of Gulstav			S of Gulstav 6 miles of land			SW of Gulstav 9 miles of land			W of Bagenkop 9 miles of land						W of Bagenkop ca. 8 miles of land			SSW of Gulstav 6 miles of land			S of Kjelds Nor Light, ca. 4 miles of land			Fishing-place
			23			21			23			30						28			23			21			Depth in m
			7			7			7			7						7			6.75			7			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
Total															Total												Length cm
4	..	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 22
10	1	11	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 23
26	6	32	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 24
51	2	53	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	 25
138	10	148	10	..	10	2	1	3	8	..	8	1	..	1	21	1	22	2	..	2	4	2	6	6	2	8	 26
156	14	170	5	1	6	4	2	6	5	1	6	7	1	8	21	5	26	2	..	2	8	2	10	11	1	12	 27
169	35	204	5	1	6	5	3	8	9	2	11	6	1	7	25	7	32	5	3	8	10	1	11	10	..	10	 28
187	42	229	17	3	20	9	6	15	8	1	9	9	3	12	43	13	56	3	2	5	16	3	19	6	3	9	 29
216	50	266	8	4	12	12	7	19	6	1	7	10	1	11	36	13	49	7	1	8	12	1	13	5	..	5	 30
173	58	231	13	2	15	8	4	12	12	1	13	7	3	10	40	10	50	8	1	9	9	5	14	14	4	18	 31
149	55	204	7	2	9	5	5	10	10	4	14	13	6	19	35	17	52	7	3	10	5	9	14	9	3	12	 32
142	44	186	12	8	20	8	9	17	6	1	7	6	5	11	32	23	55	10	3	13	9	3	12	8	4	12	 33
94	81	175	4	2	6	4	2	6	3	3	6	7	10	17	18	17	35	10	4	14	8	5	13	5	10	15	 34
83	91	174	3	9	12	1	6	7	5	5	10	5	4	9	14	24	38	7	3	10	2	9	11	6	7	13	 35
50	115	165	3	10	13	4	8	12	6	5	11	3	5	8	16	28	44	7	6	13	..	8	8	5	7	12	 36
19	122	141	..	4	4	..	8	8	..	7	7	3	10	13	3	29	32	2	9	11	3	6	9	3	7	10	 37
14	120	134	4	4	8	..	6	6	3	5	8	3	13	16	10	28	38	1	7	8	..	7	7	..	8	8	 38
12	140	152	..	8	8	1	7	8	1	12	13	..	9	9	2	36	38	..	4	4	2	6	8	1	5	6	 39
1	118	119	..	5	5	..	4	4	..	4	4	..	4	4	..	17	17	..	8	8	..	6	6	..	7	7	 40
1	81	82	..	4	4	..	6	6	..	3	3	..	1	1	..	14	14	..	3	3	..	2	2	..	5	5	 41
2	65	67	..	2	2	..	1	1	..	3	3	..	3	3	..	9	9	..	..	..	..	3	3	..	2	2	 42
..	40	40	..	1	1	..	3	3	..	6	6	..	2	2	..	12	12	..	3	3	..	2	2	..	1	1	 43
..	23	23	..	..	..	..	..	..	..	1	1	..	4	4	..	5	5	..	3	3	..	2	2	..	..	..	 44
..	21	21	..	..	..	..	1	1	..	1	1	..	..	..	..	2	2	..	2	2	..	2	2	..	2	2	 45
..	12	12	..	..	..	..	..	..	..	1	1	..	2	2	..	3	3	..	1	1	..	1	1	..	1	1	 46
697	1357[6]	3054[6]	91	70	161	63	90[8]	153[8]	82	68[8]	150[8]	80	88[9]	168[9]	316	316[10]	632[10]	71	66	137	89	88[11]	177[11]	89	81[12]	170[12]	Total number
30.19	36.63	33.05	30.68	35.69	32.86	30.90	35.13	33.39	31.01	37.62	31.01	31.51	36.72	31.24	31.02	36.23	33.63	32.31	37.12	34.63	30.52	36.26	33.37	30.93	36.54	33.61	Average length[1] cm

[6] 53 cm: 1 spec. [10] 48 cm: 2 spec., 53 cm: 1 spec. [11] 47 cm: 1 spec., 49 cm: 2 spec. [12] 48 cm: 1 spec., 51 cm: 1 spec.

Fishing-gear	Skovlvaad																							
Date of capture	3. IV. 22			3. IV. 22			5. IV. 22			5. IV. 22			8. IV. 22			8. IV. 22			10. IV. 22			10. IV. 22		
Fishing-place	SW of Gulstav 6 miles of land			SW of Gulstav ca. 5 miles of land			SW of Gulstav 5 miles of land			W of Bagenkop ca. 8 miles of land			WSW of Bagenkop 6 miles of land			WNW of Bagenkop 6 miles of land			SW of Gulstav 4 miles of land			S of Kjelds Nor 6 miles of lan		
Depth in m	23			23			23			28			23			21			21			21		
Weight pro score in kg	6.75			6.75			6.75			7			6.75			7			6.75			7		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+
Length cm																								
25	3	..	..	..	..	..	1	1	2	2	1	3	1	..	1	2	..	2	3	..	3	..	..	..
26	4	1	4	2	1	3	7	..	7	7	2	9	7	..	7	1	1	2	7	1	8	5	..	5
27	6	2	6	6	..	6	6	1	7	11	4	15	10	1	11	10	1	11	10	2	12	8	..	8
28	14	4	10	10	..	10	8	3	11	10	4	14	5	2	7	3	1	4	6	3	9	9	..	9
29	12	2	16	12	2	14	11	7	18	7	4	11	9	4	13	8	3	11	4	1	5	8	..	8
30	13	..	12	12	..	12	14	4	18	8	3	11	8	2	10	12	3	15	7	5	12	3	4	7
31	11	7	20	7	4	11	10	10	20	9	5	14	4	5	9	5	8	13	2	2	4	9	2	11
32	6	4	15	14	5	19	10	6	16	7	7	14	6	5	11	1	7	8	5	6	11	8	8	16
33	5	5	11	5	6	11	4	11	15	5	12	17	5	6	11	7	8	15	6	4	10	3	4	7
34	2	9	14	6	7	13	1	12	13	3	6	9	1	6	7	2	8	10	1	7	8	2	5	7
35	2	3	5	8	5	13	3	9	12	3	5	8	1	4	5	3	7	10	..	7	7	3	10	13
36	2	4	6	3	8	11	2	11	13	1	11	12	1	9	10	2	5	7	2	4	6	1	7	8
37	1	12	14	1	7	8	..	8	8	..	8	8	..	5	5	..	5	5	1	4	5	1	7	8
38	..	9	10	..	8	8	1	3	4	..	5	5	3	10	13	2	8	10	..	3	3	1	7	8
39	..	11	11	..	13	13	..	3	3	..	7	7	..	5	5	..	8	8	..	10	10	..	10	10
40	..	6	6	..	9	9	..	7	7	..	1	1	2	4	6	..	6	6	..	7	7	2	2	4
41	..	8	8	..	8	8	1	1	2	..	1	1	..	2	2	..	6	6	1	4	5	..	1	1
42	..	4	4	..	4	4	..	1	1	..	2	2	..	2	2	..	4	4	..	5	5	..	2	2
43	..	4	4	..	5	5	..	1	1	..	1	1	..	2	2	..	2	2	..	3	3	..	1	1
44	..	1	1	..	..	..	..	1	1	..	1	1	..	1	1	..	2	2	..	2	2	..	2	2
45	..	2	2	..	2	2	..	1	1	..	2	2	..	4	4	..	..	..	..	..	..	..	1	1
46	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	..	3	3
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Total number	81	100[2]	181[2]	86	95	181	79	101	180	73	93	166	63	79	142	58	94	152	55	82[3]	137[3]	63	77[4]	140
Average length[1] cm	30.83	36.73	34.09	30.94	37.31	34.28	30.18	34.31	32.49	29.63	34.41	32.31	30.13	35.90	33.34	30.36	35.82	33.74	29.55	35.96	33.39	30.44	36.70	33

Fishing-gear	Skovlvaad									Gillnet												
Date of capture	22. IV. 22			22. IV. 22			April 1922			11. III. 22			11. III. 22			12. III. 22			12. III. 22			13. III. 22
Fishing-place	S of Gulstav 6 miles of land			SE of Kjelds Nor Light 6 miles of land						8 miles W of Bagenkop			8 miles WSW of Bagenkop			W of Gulstav 6 miles of land			W of Bagenkop 7 miles of land			W of Gulstav 6 miles of lan
Depth in m	23			21						23			21			23			23			23
Weight pro score in kg	7			7.5						7			7.25			7			7			6.5
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂
Length cm							Total																	
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	
24	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
25	1	..	1	..	..	..	20	2	22	1	..	1	..	..	..	3	..	3	2	1	3	1	..	
26	9	..	9	1	1	2	104	13	117	1	1	2	5	..	5	5	..	5	3	..	3	1	..	
27	6	..	6	3	..	3	156	23	179	7	1	8	5	..	5	6	..	6	4	..	4	5	..	
28	2	2	4	12	1	13	173	37	210	6	1	7	7	2	9	6	2	8	13	..	13	10	..	1
29	7	1	8	8	..	8	190	50	240	10	3	13	14	2	16	12	2	14	6	4	10	9	3	1
30	4	2	6	7	1	8	206	38	244	14	4	18	12	1	13	15	1	16	11	3	14	17	1	1
31	11	4	15	14	3	17	202	83	285	10	6	16	12	4	16	13	4	17	9	3	12	11	2	1
32	7	4	11	9	1	10	175	101	276	9	9	18	12	5	17	15	4	19	8	2	10	16	2	1
33	8	5	13	12	3	15	144	112	256	6	4	10	10	3	13	12	3	15	10	5	15	13	1	1
34	..	6	6	6	5	11	89	132	221	6	3	9	18	5	23	15	4	19	12	1	13	13	1	1
35	2	6	8	7	3	10	84	110	194	8	1	9	9	3	12	12	4	16	3	4	7	17	2	1
36	1	7	8	6	2	8	58	138	196	6	7	13	7	3	10	9	3	12	4	3	7	..	..	
37	..	4	4	1	3	4	32	124	156	4	7	11	5	3	8	7	3	10	2	..	2	4	2	
38	..	6	6	3	2	5	19	124	143	..	2	2	..	2	2	1	3	4	1	2	3	1	2	
39	1	2	3	..	1	1	9	111	120	..	3	3	1	3	4	..	3	3	..	1	1	..	1	
40	1	2	3	..	5	5	6	94	100	..	2	2	..	..	..	..	1	1	..	2	2	..	1	
41	..	..	..	..	2	2	5	68	73	..	1	1	..	..	..	..	2	2	..	2	2	..	2	
42	..	..	..	..	2	2	..	41	41	..	1	1	..	3	3	..	1	1	..	..	..	..	..	
43	..	..	..	..	2	2	..	33	33	..	1	1	..	1	1	..	..	..	..	..	..	..	..	
44	..	..	..	..	..	..	..	21	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
45	..	2	2	..	..	..	..	22	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
46	..	..	..	..	..	..	..	12	12	..	..	..	..	1	1	..	..	..	..	..	..	..	..	
47	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
48	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
49	..	..	..	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
Total number	60	53	113	89	37	126	1672	1501[6]	3173[6]	88	57	145	117	41	158	131	40	171	88	33	121	120	20	1
Average length[1] cm	30.23	34.94	32.44	31.67	36.03	32.95	30.69	35.83	33.13	31.39	34.05	32.43	31.76	34.85	32.56	31.78	34.63	32.44	31.11	33.70	31.82	31.57	34.55	31

[1] Not corrected by 0.5. [2] 48 cm: 1 spec., 53 cm: 1 spec. [3] 24 cm: 1 spec. [4] 50 cm: 1 spec. [5] 49 cm: 1 spec. [6] 50 cm: 1 spec., 51 cm: 1 spec., 53 cm: 1 spec.

Skovlvaad																							Fishing-gear
12. IV. 22			18. IV. 22			18. IV. 22			18. IV. 22			20. IV. 22			20. IV. 22			21. IV. 22			21. IV. 22			Date of capture
S of Kjelds Nor 6 miles of land			S of Kjelds Nor Light 8 miles of land			SE of Kjelds Nor Light 9 miles of land			SSW of Gulstav 6 miles of land			SSWof KjeldsNor Light 6 miles of land			SE of Kjelds Nor Light 6 miles of land			SW of Gulstav 7 miles of land			SE of Kjelds Nor Light 6 miles of land			Fishing-place
21			21			17			23			23			21			23			21			Depth in m
7			7			7.5			7			7			7.5			7			7.5			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																								Length cm
4	..	4	1	..	1	..	..	..	1	..	1	3	..	3	..	..	..	..	..	..	..	..	..	25
7	..	7	4	1	5	11	..	11	4	..	4	3	..	3	6	..	6	2	..	2	6	1	7	26
9	3	12	11	2	13	12	1	13	6	..	6	6	1	7	7	..	7	3	..	3	7	2	9	27
9	2	11	11	3	14	8	2	10	12	..	12	12	..	12	5	2	7	11	2	13	9	2	11	28
10	3	13	11	2	13	8	1	9	8	2	10	11	1	12	8	4	12	12	1	13	9	4	13	29
6	2	8	11	2	13	6	2	8	15	..	15	15	1	16	16	..	16	15	2	17	11	3	14	30
9	5	14	7	7	14	13	1	14	17	5	22	10	1	11	9	1	10	13	1	14	9	2	11	31
3	1	4	10	1	11	10	8	18	8	4	12	10	5	15	16	2	18	11	5	16	8	7	15	32
3	4	7	6	6	12	7	8	15	6	5	11	8	5	13	10	1	11	9	4	13	7	5	12	33
2	8	10	2	7	9	4	5	9	9	5	14	5	3	8	6	2	8	7	6	13	4	6	10	34
1	9	10	6	4	10	5	3	8	5	1	6	4	5	9	4	6	10	6	1	7	6	3	9	35
3	10	13	3	5	8	2	4	6	4	8	12	3	6	9	3	7	10	4	5	9	3	4	7	36
1	6	7	2	6	8	3	5	8	3	6	9	..	8	8	3	2	5	4	3	7	2	3	5	37
..	9	9	1	4	5	..	6	6	3	5	8	..	5	5	..	2	2	3	7	10	..	3	3	38
..	4	4	1	2	3	..	1	1	1	6	7	..	5	5	1	1	2	1	5	6	1	2	3	39
..	4	4	..	5	5	..	1	1	1	2	3	..	1	1	..	2	2	..	4	4	..	5	5	40
1	10	11	..	5	5	..	1	1	..	..	..	..	3	3	1	1	2	..	4	4	1	1	2	41
..	3	3	..	2	2	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2	..	2	2	42
..	3	3	..	1	1	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..	43
..	3	3	..	1	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	44
..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	45
..	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	46
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47
68	93	161	87	67	154	89	49	138	103	50[5]	153[5]	90	53	143	95	35	130	101	52	153	83	56	139	Total number
9.56	36.68	33.67	30.52	35.24	32.57	30.27	34.18	31.66	31.25	35.48	32.63	30.36	36.06	32.47	31.17	35.00	32.20	31.52	35.90	33.01	30.87	34.25	32.23	Average length[1] cm

Gillnet																							Fishing-gear
14. III. 22			14. III. 22			15. III. 22			15. III. 22			17. III. 22			17. III. 22			22. III. 22			22. III. 22			Date of capture
SW of Bagenkop 7 miles of land			8 miles W of Bagenkop			7 miles WSW of Bagenkop			8 miles W of Gulstav			7 miles W of Gulstav			5 miles W of Bagenkop			8 miles W of Bagenkop			7 miles W of Gulstav			Fishing-place
21			21			23			23			23			21			23			23			Depth in m
6.75			6.75			7			7			7			6.75			7			7			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																								Length cm
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	24
2	..	2	1	..	1	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	25
3	3	6	3	..	3	5	..	5	3	1	4	3	..	3	1	..	1	4	..	4	2	1	3	26
8	1	9	6	..	6	7	..	7	2	..	2	7	..	7	3	2	5	5	..	5	3	..	3	27
4	1	5	6	..	6	10	1	11	7	3	10	4	3	7	12	1	13	7	2	9	7	..	7	28
9	1	10	4	1	5	14	..	14	8	1	9	9	3	12	6	1	7	9	1	10	13	3	16	29
12	1	13	12	2	14	14	3	17	8	..	8	15	3	18	4	1	5	7	1	8	14	2	16	30
18	3	21	14	2	16	10	2	12	15	3	18	14	2	16	4	2	6	20	2	22	9	2	11	31
12	2	14	12	2	14	14	4	18	10	4	14	13	2	15	16	1	17	13	4	17	18	2	20	32
11	4	15	7	1	8	8	2	10	13	1	14	15	2	17	8	2	10	8	4	12	9	9	18	33
13	4	17	7	1	8	9	2	11	5	2	7	9	3	12	3	1	4	6	4	10	11	3	14	34
7	8	15	7	5	12	4	7	11	6	3	9	5	2	7	5	1	6	6	3	9	6	3	9	35
4	2	6	6	1	7	2	2	4	5	3	8	8	..	8	4	..	4	2	7	9	4	4	8	36
2	6	8	..	4	4	1	1	2	1	3	4	1	2	3	1	..	1	3	7	10	3	7	10	37
2	3	5	1	4	5	1	2	3	2	2	4	1	2	3	..	..	..	2	3	5	2	4	6	38
..	4	4	..	5	5	..	1	1	1	3	4	..	1	1	..	..	..	..	2	2	1	6	7	39
..	4	4	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6	1	3	4	40
..	1	1	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	3	3	..	1	1	41
..	1	1	..	2	2	..	2	2	..	1	1	..	..	..	..	1	1	..	4	4	..	2	2	42
..	1	1	..	4	4	..	2	2	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	43
..	..	..	..	..	..	..	..	..	..	2	2	..	1	1	..	..	..	..	1	1	..	..	..	44
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	45
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	46
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	47
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	49
107	50	157	86	36	122	100	31	131	86	32	118	104	27	131	69	14	83	92	56	148	103	53	156	Total number
1.43	34.94	32.55	31.34	36.81	32.95	30.65	34.87	31.65	31.70	34.62	32.49	31.53	33.37	31.91	31.07	32.36	31.29	31.29	36.52	33.27	31.77	35.51	33.04	Average length[1] cm

Fishing-gear	Gillnet																							
Date of capture	24. III. 22			24. III. 22			25. III .22			25. III. 22			25. III. 22			26. III. 22			26. III. 22			26. III. 22		
Fishing-place	8 miles W of Bagenkop			8 miles WSW of Bagenkop			8 miles W of Gulstav			8 miles WSW of Bagenkop			7 miles W of Gulstav			9 miles W of Bagenkop			8 miles W of Gulstav			8 miles W of Bagenkop		
Depth in m	23			23			23			23			23			23			23			23		
Weight pro score in kg	6.75			7			7.25			6.5			6.75			7			7			6.75		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																								
23	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
25	2	..	2	..	..	..	1	..	1	..	..	..	1	1	2	..	..	..	..	..	..	1	..	1
26	1	..	1	1	..	1	1	1	2	5	..	5	5	..	5	3	1	4	1	..	1	3	..	3
27	3	1	4	4	..	4	1	..	1	5	..	5	4	..	4	5	..	5	3	..	3	5	..	5
28	7	3	10	1	..	1	3	2	5	9	2	11	9	..	9	7	2	9	14	..	14	12	2	14
29	3	3	6	10	1	11	5	2	7	..	9	9	13	3	16	15	..	15	13	2	15	12	..	12
30	4	1	5	3	3	6	9	1	10	11	2	13	9	1	10	14	1	15	15	3	18	18	1	19
31	5	..	5	8	2	10	6	3	9	12	2	14	9	1	10	9	..	9	11	2	13	12	..	12
32	9	4	13	7	2	9	8	3	11	15	1	16	9	4	13	10	1	11	21	..	21	19	..	19
33	5	4	9	7	3	10	5	1	6	13	1	14	13	3	16	9	..	9	9	2	11	13	1	14
34	9	1	10	8	3	11	9	4	13	11	1	12	13	2	15	12	4	16	11	2	13	18	5	23
35	6	3	9	3	5	8	4	4	8	3	1	4	10	5	15	8	..	8	5	2	7	7	..	7
36	3	6	9	2	6	8	8	2	10	10	2	12	7	3	10	2	2	4	5	1	6	10	2	12
37	1	2	3	5	1	6	..	2	2	1	3	4	4	2	6	3	4	7	2	2	4	1	2	3
38	..	5	5	..	6	6	..	4	4	2	5	7	1	6	7	..	5	5	..	2	2	..	2	2
39	1	5	6	1	6	7	1	2	3	1	2	3	..	3	3	..	3	3	..	2	2	1	1	2
40	1	2	3	..	2	2	..	3	3	..	2	2	..	1	1	..	3	3	..	..	..	..	1	1
41	..	2	2	..	5	5	..	..	..	..	4	4	..	..	..	..	..	..	..	2	2	..	..	..
42	..	1	1	..	..	..	..	..	..	1	3	4	..	1	1	..	..	..	..	..	..	..	1	1
43	..	..	..	..	1	1	..	..	..	..	3	3	..	..	..	..	..	..	..	..	..	..	..	..
44	..	..	..	..	1	1	..	..	..	..	1	1	..	1	1	..	..	..	..	1	1	..	..	..
45	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
47		..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	60	43	103	60	47	107	61	34	95	99	45	144	107	37	144	97	26	123	110	23	133	132	19	151
Average length[1] cm	31.80	35.02	33.15	31.97	36,34	33.89	32.08	34.24	32.85	31.93	35.82	33.15	31.66	35.03	32.53	31.25	35.65	32.18	31.27	34.96	31.90	31.55	34.58	31.9

Fishing-gear	Gillnet																							
Date of capture	2. IV. 22			2. IV. 22			2. IV. 22			3. IV. 22			3. IV. 22			6. IV. 22			6. IV. 22			6. IV. 22		
Fishing-place	SW of Gulstav ca. 3 miles of land			WSW of Bagenkop 6 miles of land			W of Bagenkop 5 miles of land			WSW of Bagenkop 6 miles of land			WNW of Bagenkop ca. 3 miles of land			WSW of Bagenkop 3 miles of land			SW of Gulstav 3 miles of land			SW of Bagenkop 5 miles of lan		
Depth in m	21			23			23			23			19			21			21			23		
Weight pro score in kg	7			6.5			6.75			7			7.25			7			6.75			7		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																								
24	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	1	1	2	3	..	3	2	..	2	..	..	..	..	..	..	3	..	3	2	..	2
26	7	..	7	4	..	4	5	..	5	3	..	3	7	1	8	4	1	5	2	..	2	..	..	..
27	5	..	5	6	2	8	8	..	8	6	..	6	7	1	8	4	1	5	6	..	6	7	3	1
28	11	2	13	12	1	13	11	..	11	11	1	12	6	5	11	11	3	14	10	2	12	4	1	5
29	7	2	9	7	2	9	11	3	14	5	2	7	7	2	9	13	4	17	13	2	15	6	2	8
30	11	3	14	8	2	10	13	..	13	8	2	10	9	2	11	10	..	10	3	1	4	13	6	19
31	6	3	9	8	1	9	10	7	17	12	5	17	7	4	11	14	..	14	12	3	15	17	4	21
32	10	3	13	6	4	10	11	4	15	6	2	8	4	3	7	10	1	11	9	4	13	4	1	5
33	5	4	9	2	5	7	3	2	5	3	5	8	6	5	11	3	5	8	8	3	11	4	3	7
34	4	4	8	3	4	7	7	..	7	2	4	6	4	5	9	8	1	9	6	2	8	5	2	7
35	6	2	8	..	..	..	3	6	9	4	4	8	3	1	4	5	1	6	2	3	5	8	1	9
36	5	3	8	..	..	..	3	5	8	4	5	9	1	7	8	5	4	9	4	2	6	2	6	8
37	1	4	5	2	2	4	3	2	5	2	4	6	1	2	3	2	1	3	1	2	3	5	..	5
38	..	2	2	2	1	3	1	3	4	1	5	6	..	2	2	1	2	3	..	5	5	..	1	1
39	..	3	3	1	1	2	..	1	1	..	4	4	..	2	2	1	1	2	..	2	2	..	1	1
40	..	1	1	..	1	1	..	2	2		1	1	1	3	4	..	1	1	..	2	2	..	..	..
41	..	..	..	..	4	4	..	..	..	..	2	2	..	1	1	..	1	1	..	4	4	..	..	..
42	..	..	..	..	2	2	..	1	1	..	1	1	..	2	2	..	..	..	..	..	..	..	1	1
43	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
44	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..	..	..	..
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	79	36	115	62	33	95	92	38	130	69	48	117	63	49	112	91	27	118	79	38[2]	117[3]	77	34	1
Average length[1] cm	30.58	33.89	31.62	30.11	34.06	31.48	30.42	34.82	31.70	30.58	35.17	32.46	30.30	34.08	31.96	31.08	33.19	31.56	30.57	35.32	32.11	31.29	33.15	31

[1] Not corrected by 0.5. [2] 47 cm: 1 spec. [3] 54 cm: 1 spec.

Gillnet																							Fishing-gear
26. III. 22			26. III. 22			26. III. 22			28. III. 22			29. III. 22			30. III. 22			31. III. 22			March 1922			Date of capture
8 miles W of Gulstav			7 miles W of Bagenkop			8 miles W of Gulstav			5 miles WSW of Bagenkop			SW of Bagenkop 8 miles of land			W of Bagenkop 6 miles of land			W of Bagenkop 4 miles of land						Fishing-place
23			23			23			23			23			23			23						Depth in m
7			6.75			7			6			6.5			6.5			6.5						Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																					Total			Length cm
..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	3	..	3	23
..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	1	1	..	1	3	1	4	24
..	..	..	1	..	1	..	..	..	3	..	3	5	..	5	3	..	3	6	..	6	35	3	38	25
..	..	..	4	..	4	6	..	6	5	1	6	7	..	7	7	..	7	4	2	6	92	11	103	26
4	..	4	3	..	3	13	..	13	8	..	8	5	1	6	8	5	13	4	2	6	143	13	156	27
3	1	4	5	1	6	12	..	12	15	3	18	11	6	17	10	4	14	8	3	11	225	45	270	28
4	1	5	9	..	9	7	..	7	7	1	8	16	3	19	8	2	10	9	2	11	254	54	308	29
7	1	8	6	6	12	11	2	13	11	..	11	8	5	13	5	2	7	6	2	8	292	54	346	30
10	..	10	11	..	11	12	1	13	9	4	13	11	6	17	9	1	10	9	3	12	302	62	364	31
11	2	13	16	3	19	9	3	12	7	1	8	13	3	16	11	4	15	6	3	9	339	77	416	32
7	3	10	13	5	18	6	3	9	6	2	8	4	5	9	8	8	16	6	7	13	254	89	343	33
5	5	10	13	8	21	9	4	13	7	1	8	5	2	7	5	1	6	7	3	10	269	80	349	34
3	6	9	10	5	15	6	2	8	6	2	8	3	1	4	1	4	5	3	3	6	173	89	262	35
4	5	9	4	7	11	4	1	5	3	3	6	1	3	4	2	5	7	2	..	2	128	83	211	36
1	3	4	1	4	5	5	7	12	1	2	3	..	1	1	3	1	4	3	1	4	65	82	147	37
1	5	6	3	6	9	..	4	4	..	2	2	..	2	2	..	5	5	1	2	3	22	92	114	38
..	6	6	1	5	6	1	6	7	..	3	3	1	1	2	..	2	2	..	1	1	11	81	92	39
..	2	2	..	4	4	..	3	3	..	2	2	..	..	..	..	3	3	..	2	2	2	50	52	40
..	5	5	..	1	1	..	2	2	..	..	..	..	2	2	..	3	3	..	1	1	..	41	41	41
..	1	1	..	..	..	..	..	..	..	1	1	..	2	2	..	2	2	..	1	1	1	31	32	42
..	2	2	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	..	19	19	43
..	1	1	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	11	11	44
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	45
..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	3	3	46
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	1	2	47
..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	48
..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	49
60	50	110	100	57	157	101	38	139	89	29	118	91	46	137	81	54	135	75	38	113	2614	1076	3690	Total number
31.75	36.98	34.13	31.99	35.65	33.32	30.87	36.18	32.32	30.25	34.86	31.38	29.85	33.48	31.07	30.43	34.11	31.90	30.45	32.89	31.27	31.34	35.01	32.11	Average length[1] cm

Gillnet																							Fishing-gear
7. IV. 22			7. IV. 22			7. IV. 22			8. IV. 22			8. IV. 22			9. IV. 22			9. IV. 22			9. IV. 22			Date of capture
WNW of Bagenkop 2 miles of land			WSW of Bagenkop 4 miles of land			W of Bagenkop 5 miles of land			SSW of Bagenkop 4 miles of land			W of Bagenkop 5 miles of land			SW of Gulstav 4 miles of land			NW of Bagenkop 1 mile of land			SW of Gulstav 4 miles of land			Fishing-place
19			23			23			21			23			23			17			21			Depth in m
7			6.75			7			7			6.75			6.75			7			7			Weight pro score in kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																								Length cm
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
..	..	..	..	..	..	..	..	..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..	25
4	1	5	2	..	2	2	..	2	2	..	2	1	..	1	5	..	5	2	..	2	6	..	6	26
4	1	5	3	4	7	10	..	10	7	..	7	4	..	4	9	1	10	3	2	5	11	..	11	27
2	1	3	5	1	6	8	..	8	6	5	11	7	2	9	6	3	9	2	2	4	10	1	11	28
5	4	9	4	..	4	10	1	11	12	3	15	6	2	8	8	3	11	10	1	11	9	1	10	29
5	..	5	15	2	17	9	4	13	11	1	12	9	1	10	5	1	6	10	5	15	9	4	13	30
8	4	12	8	2	10	9	4	13	8	4	12	12	1	13	10	3	13	12	2	14	5	5	10	31
10	1	11	9	2	11	1	3	4	8	8	16	3	3	6	8	3	11	11	3	14	6	5	11	32
6	4	10	6	6	12	4	4	8	6	4	10	6	3	9	6	4	10	8	5	13	9	2	11	33
9	4	13	4	1	5	5	2	7	9	2	11	4	1	5	7	4	11	6	2	8	5	3	8	34
5	4	9	5	3	8	9	..	9	7	4	11	4	2	6	4	5	9	8	2	10	3	8	11	35
5	4	9	1	2	3	6	2	8	4	3	7	6	1	7	3	4	7	6	7	13	2	5	7	36
1	2	3	2	3	5	2	..	2	2	4	6	2	3	5	..	1	1	1	2	3	3	8	11	37
2	1	3	1	..	1	..	6	6	..	1	1	3	2	5	..	4	4	1	1	2	..	6	6	38
1	2	3	1	..	1	1	3	4	..	..	..	1	3	4	..	2	2	..	4	4	..	5	5	39
..	2	2	..	3	3	..	2	2	..	..	..	..	..	..	..	2	2	..	5	5	..	3	3	40
..	2	2	..	2	2	..	2	2	..	..	..	..	..	..	..	2	2	..	1	1	..	6	6	41
..	2	2	..	2	2	..	1	1	..	1	1	..	1	1	..	4	4	..	1	1	..	3	3	42
..	..	..	..	2	2	..	..	..	..	2	2	..	2	2	..	1	1	..	1	1	..	2	2	43
..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	44
..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	45
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	46
67	40	107	66	36	102	76	35	111	83	43	126	69	27	96	71	47	118	80	48[2]	128[2]	78	69[3]	147[3]	Total number
31.97	34.63	32.96	31.38	34.97	32.65	31.09	35.26	32.41	31.12	33.58	31.96	31.65	34.89	32.56	30.61	34.98	32.35	31.78	35.15	33.04	30.33	36.45	33.20	Average length[1] cm

Fishing-gear	Gillnet																	
Date of capture	10. IV. 22			11. IV. 22			11. IV. 22			12. IV. 22			15. IV. 22			15. IV. 22		
Fishing-place	NW of Bagenkop 1 mile of land			WSW of Bagenkop 5 miles of land			W of Bagenkop 5 miles of land			SW of Gulstav 3 miles of land			SW of Gulstav 5 miles of land			SW of Bagenkop 4 miles of land		
Depth in m	17			23			21			21			21			21		
Weight pro score in kg	7			6.75			7			7			6.75			7		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																		
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	3	..	3	..	..	..	..	..	..
26	7	2	9	4	..	4	4	..	4	4	2	6	4	..	4	4	1	5
27	7	2	9	11	2	13	6	1	7	4	1	5	5	..	5	11	..	11
28	14	2	16	10	..	10	8	1	9	9	1	10	6	2	8	8	2	10
29	11	3	14	6	4	10	13	4	17	8	1	9	8	1	9	13	3	16
30	8	1	9	12	5	17	8	3	11	5	4	9	7	4	11	4	1	5
31	5	4	9	8	7	15	8	1	9	6	3	9	10	3	13	9	2	11
32	7	4	11	4	6	10	6	2	8	7	8	15	7	7	14	5	5	10
33	4	4	8	6	4	10	4	6	10	8	3	11	5	5	10	10	3	13
34	9	7	16	9	7	16	2	4	6	2	8	10	10	3	13	5	5	10
35	6	6	12	3	14	17	8	8	16	4	5	9	3	3	6	3	4	7
36	4	8	12	2	9	11	1	7	8	1	7	8	3	7	10	5	9	14
37	2	7	9	1	8	9	2	7	9	1	5	6	2	8	10	1	4	5
38	1	6	7	..	6	6	1	6	7	1	7	8	1	4	5	1	4	5
39	..	5	5	2	2	4	..	6	6	2	7	9	..	6	6	..	1	1
40	..	2	2	..	5	5	1	3	4	..	5	5	..	7	7	..	1	1
41	..	4	4	..	9	9	..	3	3	..	3	3	..	3	3	..	..	..
42	..	1	1	..	2	2	..	1	1	..	..	..	..	1	1	..	2	2
43	..	2	2	..	1	1	..	..	..	..	..	..	..	..	..	..	2	2
44	..	1	1	..	1	1	..	1	1	..	3	3	..	..	..	..	1	1
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
46	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1
47	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..
48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	85	71	156	78	94	172	72	65	137	65	73	138	71	64	135	79	52	131
Average length[1] cm	30.65	35.17	32.71	30.60	35.63	33.35	30.76	35.66	33.09	30.65	35.37	33.14	31.17	35.52	33.23	30.65	35.35	32.51

Fishing-gear	Gillnet																	
Date of capture	19. IV. 22			19. IV. 22			20. IV. 22			21. IV. 22			21. IV. 22			April 1922		
Fishing-place	SW of Gulstav 4 miles of land			WSW of Bagenkop 6 miles of land			W of Bagenkop 6 miles of land			NW of Bagenkop 1 mile of land			SW of Bagenkop 3 miles of land					
Depth in m	23			23			21			15			21					
Weight pro score in kg	7.5			7			7.5			8.25			7.5					
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																Total		
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
25	1	..	1	..	..	..	2	..	2	2	..	2	..	1	1	21	2	23
26	1	1	2	4	..	4	3	1	4	1	1	2	3	..	3	95	11	106
27	5	1	6	5	2	7	7	5	12	2	1	3	..	2	2	163	32	195
28	4	1	5	8	..	8	2	1	3	2	..	2	2	2	4	195	42	237
29	8	..	8	1	6	7	4	4	8	2	1	3	4	3	7	211	64	275
30	2	4	6	4	3	7	12	6	18	1	1	2	7	7	14	218	73	291
31	3	2	5	5	1	6	1	8	9	2	3	5	4	4	8	219	90	309
32	3	8	11	6	5	11	5	2	7	..	3	3	8	8	16	174	108	282
33	4	7	11	..	5	5	6	8	14	2	4	6	7	8	15	141	121	262
34	3	9	12	6	2	8	2	6	8	1	4	5	3	8	11	140	104	244
35	1	5	6	2	9	11	3	5	8	2	5	7	..	6	6	111	116	227
36	3	5	8	2	4	6	3	5	8	2	8	10	3	8	11	86	137	223
37	2	5	7	1	4	5	4	4	8	1	5	6	1	7	8	48	104	152
38	..	8	8	1	6	7	1	6	7	..	6	6	..	8	8	19	109	128
39	..	6	6	..	8	8	..	10	10	..	6	6	3	6	9	13	97	110
40	..	2	2	..	3	3	..	3	3	..	6	6	..	8	8	2	73	75
41	..	1	1	..	4	4	..	2	2	..	2	2	..	6	6	..	64	64
42	..	3	3	..	4	4	..	2	2	..	6	6	..	1	1	..	45	45
43	..	..	..	..	1	1	..	..	..	..	1	1	..	2	2	..	22	22
44	..	..	..	..	1	1	..	..	..	..	3	3	..	..	..	..	18	18
45	..	..	..	..	1	1	..	2	2	..	1	1	..	..	..	..	7	7
46	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	3	3
47	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	5	5
48	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1
Total number	40	68	108	45	71	116	55	80	135	20	67	87	45	96	141	1857	1449[2]	3306[2]
Average length[1] cm	30.75	35.01	33.44	30.67	36.17	34.03	30.98	34.53	33.09	30.75	36.91	35.49	31.89	35.24	34.17	30.90	35.14	32.76

[1] Not corrected by 0.5. [2] 54 cm: 1 spec.

Table of Measurements II — Length of Plaice taken in Langelandsbelt.

June—August 1922.

Fishing-gear	Skovlvaad																	
Date of capture	8. VII. 22			8. VII. 22			9. VII. 22			21. VII. 22			21. VII. 22			22. VII. 22		
Fishing-place	E of Kjelds Nor Light 3 miles of land			Off Brolykke 4 miles of land			E of Lunden 4 miles of land			Off Brolykke 2 miles of land			Off Brolykke 2 miles of land			E of Kjelds Nor Light 3 miles of land		
Depth in m	23			20			21			28			28			24		
Weight pro score kg	8.5			8.5			9			9			9.5			10		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																		
25	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
26	1	1	2	1	..	1	..	..	..	1	..	1	1	..	1	1	..	1
27	2	2	4	..	2	2	..	3	3	1	..	1	2	..	2	1	..	1
28	3	6	9	1	3	4	4	1	5	1	1	2	1	..	1	..	1	1
29	1	4	5	1	3	4	3	1	4	5	3	8	3	..	3	5	..	5
30	3	5	8	3	4	7	2	6	8	2	1	3	3	..	3	7	..	7
31	4	3	7	4	2	6	3	3	6	6	2	8	5	5	10	1	4	5
32	5	7	12	4	4	8	3	9	12	10	5	15	2	5	7	10	6	16
33	3	8	11	7	18	25	1	6	7	7	10	17	11	8	19	10	4	14
34	3	11	14	1	13	14	5	7	12	8	3	11	4	11	15	12	13	25
35	1	2	3	4	15	19	..	6	6	6	12	18	5	11	16	5	7	12
36	1	6	7	2	6	8	1	14	15	4	8	12	4	18	22	1	13	14
37	1	4	5	..	9	9	1	10	11	..	15	15	2	10	12	..	10	10
38	..	9	9	..	8	8	..	10	10	..	14	14	1	7	8	..	11	11
39	1	8	9	1	8	9	..	7	7	..	10	10	..	3	3	1	7	8
40	..	3	3	..	6	6	..	4	4	..	7	7	..	6	6	..	8	8
41	..	8	8	..	7	7	..	11	11	..	7	7	..	5	5	..	5	5
42	..	1	1	..	2	2	..	5	5	..	2	2	..	3	3	..	6	6
43	..	6	6	..	5	5	..	2	2	..	1	1	..	3	3	..	1	1
44	..	2	2	..	1	1	..	2	2	..	1	1	..	1	1	..	1	1
45	..	..	..	..	1	1	..	2	2	..	..	..	..	1	1	..	2	2
46	..	2	2	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..
47	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	1	1
48	..	..	..	..	1	1	..	2	2	..	..	..	..	..	..	..	..	..
Total number	29	98	127	30	118	148	23	112[2]	135[2]	51	105[3]	156[3]	44	100[4]	144[4]	54	100	154
Average length[1] cm	31.55	35.56	34.65	32.20	35.80	35.07	31.48	36.63	35.75	32.33	36.83	35.36	32.59	36.70	35.44	32.35	36.93	35.32

Fishing-gear	Skovlvaad																	
Date of capture	25. VII. 22			26. VII. 22			27. VII. 22			27. VII. 22			28. VII. 22			30. VII. 22		
Fishing-place	Off Brolykke 3 miles of land			Off Brolykke 3 miles of land			E of Kjelds Nor Light 4 miles of land			E of Kjelds Nor Light 5 miles of land			Off Brolykke 4 miles of land			Off Brolykke 4 miles of land		
Depth in m	24			24			21			19			21			21		
Weight pro score kg	9			9.5			9.5			10			10			10		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm																		
25	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..
26	1	1	2	2	1	3	..	1	1	..	..	..	..	..	..	..	1	1
27	1	1	2	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..
28	5	4	9	..	1	1	2	..	2	..	..	..	1	1	2	..	2	2
29	4	4	8	1	4	5	1	1	2	..	..	..	..	1	1	2	1	3
30	4	3	7	4	5	9	2	6	8	2	..	2	4	5	9	4	5	9
31	4	7	11	2	1	3	6	4	10	6	4	10	4	2	6	6	1	7
32	5	8	13	5	4	9	7	3	10	5	4	9	8	5	13	4	5	9
33	4	5	9	3	9	12	1	7	8	1	7	8	6	5	11	2	9	11
34	4	10	14	3	9	12	6	7	13	5	8	13	3	10	13	3	6	9
35	2	5	7	1	11	12	2	6	8	4	12	16	8	12	20	2	14	16
36	1	8	9	6	10	16	2	9	11	4	15	19	3	21	24	2	5	7
37	1	10	11	..	5	5	3	10	13	4	21	25	1	14	15	2	12	14
38	1	9	10	1	12	13	..	9	9	..	17	17	..	14	14	..	10	10
39	..	5	5	1	7	8	..	11	11	..	24	24	1	17	18	..	8	8
40	..	11	11	..	8	8	..	10	10	..	6	6	..	12	12	..	13	13
41	..	6	6	..	9	9	..	11	11	..	9	9	..	10	10	..	8	8
42	..	6	6	..	6	6	..	7	7	..	2	2	..	6	6	..	2	2
43	..	1	1	..	2	2	..	3	3	..	5	5	..	6	6	..	1	1
44	1	2	3	..	2	2	..	2	2	..	2	2	..	1	1	..	3	3
45	..	1	1	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..
46	..	1	1	..	..	..	..	2	2	..	1	1	..	2	2	..	..	..
Total number	38	109[2]	147[2]	29	106	135	33	110[2]	143[2]	32	138	170	39	146[5]	185[5]	27	106	133
Average length[1] cm	31.74	36.04	34.93	32.83	36.38	35.61	32.42	37.29	36.17	33.38	37.40	36.64	33.13	37.34	36.45	32.44	36.47	35.65

[1] Not corrected by 0.5. [2] 49 cm: 1 spec. [3] 51 cm: 1 spec. [4] 50 cm: 1 spec. [5] 47 cm: 1 spec.

Skovlvaad

Fishing-gear	Skovlvaad																														
Date of capture	30. VII. 22			31. VII. 22			July 1922			12. VIII. 22			12. VIII. 22			14. VIII. 22			22. VIII. 22			24. VIII. 22			August 1922						
Fishing-place	E of Kjelds Nor Light 5 miles of land			E of Kjelds Nor Light 6 miles of land						E of Kjelds Nor Light 3 miles of land			E of Kjelds Nor Light 4 miles of land			Off Lunden 2 miles of land			Off Lunden 3 miles of land			E of Kjelds Nor Light 6 miles of land									
Depth in m	19			23						24			23			28			24			24									
Weight pro score kg	10			9.5						10			10			10			9.5			9									
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	
Length cm							Total																					Total			
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1				
25	..	..	..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1				
26	1	..	1	..	..	..	9	5	14	..	..	..	..	..	..	..	..	..	2	1	3	1	1	2	3	2	5				
27	..	..	..	1	3	4	9	11	20	1	1	2	1	..	1	1	1	2	1	..	1	..	3	3	4	5	9				
28	1	1	2	4	..	4	23	21	44	..	1	1	1	1	2	3	..	3	3	1	4	1	3	4	8	6	14				
29	..	..	..	3	..	3	29	22	51	5	1	6	1	3	4	4	3	7	3	1	4	1	2	3	14	10	24				
30	..	3	3	4	..	4	44	43	87	5	1	6	5	3	8	2	7	9	7	4	11	2	4	6	21	19	40				
31	2	3	5	4	4	8	57	45	102	2	6	8	4	5	9	8	4	12	3	9	12	2	7	9	19	31	50				
32	3	3	6	3	12	15	74	80	154	6	5	11	2	7	9	7	8	15	4	10	14	5	9	14	21	39	63				
33	5	5	10	7	7	14	68	108	176	4	14	18	2	18	20	2	10	12	3	9	12	3	6	9	14	57	71				
34	3	5	8	1	13	14	61	126	187	3	12	15	4	13	17	4	10	14	5	15	20	2	8	10	18	58	76				
35	1	10	11	1	8	9	42	131	173	..	15	15	1	12	13	7	8	15	4	2	6	3	12	15	15	49	64				
36	..	15	15	..	17	17	31	165	196	1	18	19	..	16	16	2	11	13	..	6	6	7	7	14	10	58	68				
37	2	15	17	..	17	17	17	162	179	1	11	12	..	13	13	1	13	14	..	11	11	1	10	11	3	58	61				
38	1	13	14	..	13	13	4	156	160	2	9	11	..	11	11	..	15	15	1	11	12	..	4	4	3	50	53				
39	..	10	10	2	15	17	7	140	147	..	9	9	1	7	8	..	9	9	..	6	6	..	3	3	1	34	35				
40	..	10	10	..	8	8	..	112	112	..	6	6	..	7	7	..	11	11	..	2	2	..	8	8	..	31	34				
41	..	9	9	..	12	12	..	117	117	..	8	8	..	4	4	..	6	6	..	5	5	..	3	3	..	26	26				
42	..	4	4	..	1	1	..	53	53	..	..	..	..	4	4	..	5	5	..	2	2	..	3	3	..	14	14				
43	..	2	2	..	4	4	..	42	42	..	3	3	..	1	1	..	..	..	..	1	1	..	..	..	..	5	5				
44	..	4	4	..	1	1	1	25	26	..	3	3	..	2	2	..	1	1	..	..	..	..	..	..	..	6	6				
45	..	..	..	..	..	..	..	9	9	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..	..	2	2				
46	..	..	..	..	2	2	..	12	12	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2				
47	..	..	..	..	..	..	..	4	4	..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2				
48	..	1	1	..	..	..	..	4	4	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1				
49	..	1	1	..	..	..	..	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..				
Total number	19	115[2]	134[2]	30	137	167	478	1600[3]	2078[3]	30	127	157	22	128	150	41	123	164	36	96	132	28	96	124	157	570	727				
Average length[1] cm	32.95	37.57	36.92	31.47	36.67	35.74	32.36	36.72	35.72	31.97	36.38	35.54	31.73	35.75	35.16	32.07	36.07	35.07	31.33	35.06	34.05	33.07	34.57	34.23	32.01	35.65	34.8				

Gillnet

Fishing-gear	Gillnet																														
Date of capture	6. VII. 22			12. VII. 22			12. VII. 22			14. VII. 22			July 1922			3. VIII. 22			3. VIII. 22			4. VIII. 22									
Fishing-place	Off Brolykke 3 miles of land			Off Brolykke 3 miles of land			ENE of Kjelds Nor 4 miles of land			Off Brolykke 3 miles of land						Off Brolykke 3 miles of land			E of Lunden 4 miles of land			E of Kjelds Nor Light 3 miles of land									
Depth in m	23			21			19			21						23			21			23									
Weight pro score kg	9			9.5			10			10						10			10.5			10									
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀				
Length cm													Total																		
25	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	1	..	1							
26	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..							
27	3	2	5	3	1	4	..	3	3	1	..	1	7	6	13	1	..	1	1	..	1	2	..	2							
28	3	1	4	1	2	3	..	2	2	1	1	2	5	6	11	2	4	6	1	1	2	..	1	1							
29	2	2	4	7	3	10	5	1	6	3	1	4	17	7	24	5	2	7	3	3	6	4	2	6							
30	4	4	8	3	2	5	3	1	4	1	1	2	11	8	19	2	2	4	1	2	3	2	6	8							
31	5	4	9	3	5	8	4	4	8	3	4	7	15	17	32	1	4	5	6	5	11	5	4	9							
32	7	9	16	1	5	6	5	8	13	7	3	10	20	25	45	4	9	13	5	10	15	10	8	18							
33	7	16	23	4	14	18	2	7	9	..	3	3	13	40	53	4	11	15	4	6	10	4	13	17							
34	3	8	11	3	4	7	3	9	12	1	2	3	10	23	33	2	15	17	5	11	16	3	9	12							
35	1	11	12	1	9	10	1	9	10	2	6	8	5	35	40	6	11	17	4	18	22	2	9	11							
36	2	8	10	1	10	11	2	8	10	2	3	5	7	29	36	1	11	12	5	17	22	1	13	14							
37	1	12	13	..	15	15	3	12	15	2	8	10	6	47	53	..	9	9	2	10	12	3	15	18							
38	..	8	8	2	15	17	1	8	9	..	5	5	3	36	39	3	8	11	..	9	9	..	9	9							
39	..	10	10	..	12	12	..	17	17	..	7	7	..	46	46	..	9	9	2	7	9	..	10	10							
40	..	7	7	1	9	10	..	9	9	..	6	6	1	31	32	..	10	10	..	5	5	1	5	6							
41	..	7	7	..	5	5	..	7	7	..	6	6	..	25	25	..	8	8	..	2	2	..	6	6							
42	..	3	3	..	11	11	..	3	3	..	2	2	..	19	19	..	2	2	..	6	6	..	3	3							
43	..	6	6	..	3	3	..	5	5	..	3	3	..	17	17	..	2	2	..	1	1	..	..	..							
44	..	5	5	..	1	1	..	3	3	..	3	3	..	12	12	..	..	..	..	2	2	..	..	..							
45	..	1	1	..	1	1	..	7	7	..	3	3	..	12	12	..	..	..	..	..	..	..	1	1							
46	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..							
47	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..							
48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..							
49	..	1	1	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..							
Total number	38	126	164	31	128	159	29	123	152	23	67	90	121	444	565	31	119	150	40	115	155	38	114	152							
Average length[1] cm	31.55	36.46	35.32	31.39	36.74	35.70	32.52	37.09	36.22	32.13	37.57	36.18	31.85	36.88	35.81	32.18	35.94	35.23	32.93	35.77	35.04	32.13	35.68	34.4							

[1] Not corrected by 0.5. [2] 54 cm: 1 spec. [3] 50 cm: 1 spec., 51 cm: 1 spec., 54 cm: 1 spec.

Gillnet																							Fishing-gear
16. VI. 22			17. VI. 22			20. VI. 22			24. VI. 22			25. VI. 22			26. VI. 22			27. VI. 22			June 1922			Date of capture
E of Brolykke 2 miles of land			E of Bovballe 3 miles of land			E of Brolykke 2 miles of land			E of Brolykke 2 miles of land			E of Brolykke 2 miles of land			E of Bovballe 2 miles of land			E of Brolykke 2 miles of land						Fishing-place
19			20			20			21			20			21			21						Depth in m
8.5			9			8.5			10			10			9.5			10						Weight pro score kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																					Total			Length cm
..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1	 24
..	..	..	..	..	..	1	1	2	..	1	1	2	..	2	2	..	2	..	..	..	5	2	7	 25
1	1	2	2	..	2	1	..	1	1	2	3	1	1	2	2	..	2	..	..	..	8	4	12	 26
1	..	1	5	1	6	3	2	5	6	1	7	1	..	1	3	..	3	1	..	1	20	4	24	 27
1	1	2	2	2	4	1	..	1	2	1	3	2	4	6	8	1	9	2	..	2	18	9	27	 28
5	4	9	8	5	13	3	7	10	6	3	9	8	6	14	9	4	13	..	1	1	39	30	69	 29
11	5	16	6	4	10	4	2	6	10	6	16	11	8	19	7	7	14	3	3	6	52	35	87	 30
5	12	17	8	12	20	10	6	16	12	11	23	5	7	12	11	7	18	2	1	3	53	56	109	 31
9	10	19	7	14	21	3	14	17	12	13	25	6	10	16	10	19	29	4	7	11	51	87	138	 32
5	14	19	4	14	18	8	19	27	14	8	22	10	18	28	4	9	13	2	5	7	47	87	134	 33
6	8	14	5	6	11	4	16	20	9	7	16	6	14	20	1	8	9	..	8	8	31	67	98	 34
4	15	19	3	10	13	1	13	14	4	11	15	2	11	13	4	13	17	1	14	15	19	87	106	 35
1	5	6	3	6	9	2	6	8	3	6	9	2	8	10	3	8	11	1	14	15	15	53	68	 36
..	7	7	1	1	2	2	6	8	1	5	6	1	9	10	..	15	15	1	8	9	6	51	57	 37
..	6	6	1	7	8	..	9	9	..	9	9	..	4	4	..	5	5	1	6	7	2	46	48	 38
1	7	8	2	3	5	..	6	6	..	10	10	..	8	8	..	3	3	..	10	10	3	47	50	 39
..	5	5	..	5	5	..	2	2	..	..	..	..	1	1	..	4	4	..	11	11	..	28	28	 40
..	3	3	..	2	2	..	6	6	..	1	1	..	..	..	..	2	2	1	11	12	1	25	26	 41
..	1	1	..	1	1	..	2	2	..	..	..	..	1	1	..	3	3	..	5	5	..	13	13	 42
..	1	1	..	1	1	..	1	1	..	1	1	..	1	1	..	..	..	..	..	..	..	5	5	 43
..	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	4	4	 44
..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..	..	3	3	..	5	5	 45
..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	1	1	..	2	2	..	4	4	 46
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 47
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	 48
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 49
50	108	158	57	94	151	43	119	162	80	97	177	58	112	170	64	111	175	19	109	128	371	750	1121	Total number
1.66	34.77	33.78	31.49	33.90	32.99	31.49	34.57	33.75	31.59	34.08	32.95	31.12	33.92	32.96	30.52	34.73	33.19	32.42	37.13	36.43	31.36	34.75	33.63	Average length[1] cm

Gillnet																							Fishing-gear
4. VIII. 22			5. VIII. 22			7. VIII. 22			8. VIII. 22			8. VIII. 22			8. VIII. 22			10. VIII. 22			10. VIII. 22			Date of capture
Off Brolykke 3 miles of land			E of Lunden 4 miles of land			E of Kjelds Nor Light 4 miles of land			Off Lunden 4 miles of land			E of Brolykke 3 miles of land			E of Kjelds Nor Light 4 miles of land			Off Lunden 3 miles of land			Off Brolykke 4 miles of land			Fishing-place
23			21			21			23			23			32			23			23			Depth in m
10.5			10			10.5			10.5			10.5			10.5			10			10			Weight pro score kg
♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	Sex
																								Length cm
1	..	1	..	..	..	..	..	..	..	1	1	1	2	3	..	..	..	1	..	1	1	..	1	 25
..	1	1	2	..	2	2	1	3	1	2	3	2	1	3	1	..	1	..	..	..	1	1	2	 26
..	2	2	..	1	1	1	1	2	2	1	3	2	..	2	..	..	..	1	..	1	1	..	1	 27
2	1	3	1	2	3	4	1	5	3	2	5	..	2	2	1	..	1	2	1	3	2	2	4	 28
..	3	3	2	3	5	3	2	5	6	4	10	3	4	7	1	..	1	5	1	6	7	..	7	 29
3	4	7	5	7	12	6	2	8	8	8	16	8	1	9	3	3	6	6	3	9	10	4	14	 30
5	5	10	5	7	12	4	5	9	2	6	8	7	2	9	3	5	8	7	6	13	14	6	20	 31
4	13	17	7	4	11	11	7	18	6	4	10	7	5	12	7	8	15	9	4	13	9	3	12	 32
7	8	15	5	18	23	8	12	20	4	14	18	12	3	15	7	3	10	12	8	20	12	10	22	 33
4	13	17	3	13	16	8	12	20	3	11	14	6	5	11	4	7	11	8	10	18	7	9	16	 34
6	10	16	5	11	16	9	8	17	3	7	10	6	5	11	5	8	13	4	9	13	7	10	17	 35
1	10	11	4	8	12	3	14	17	3	16	19	4	10	14	1	16	17	2	14	16	4	8	12	 36
..	14	14	1	15	16	2	15	17	2	12	14	2	9	11	5	15	20	..	7	7	1	10	11	 37
1	11	12	1	10	11	1	12	13	..	7	7	3	3	6	1	11	12	..	6	6	..	9	9	 38
1	10	11	..	5	5	..	12	12	..	13	13	..	9	9	..	13	13	..	7	7	..	6	6	 39
..	7	7	..	6	6	..	4	4	..	4	4	..	6	6	..	6	6	..	4	4	..	1	1	 40
..	11	11	..	11	11	..	9	9	..	3	3	..	6	6	..	7	7	..	5	5	..	..	..	 41
..	3	3	1	7	8	..	2	2	..	3	3	..	4	4	..	2	2	..	4	4	..	1	1	 42
..	2	2	..	8	8	..	4	4	..	1	1	..	2	2	..	..	..	..	1	1	..	3	3	 43
..	3	3	..	..	..	..	1	1	..	3	3	..	1	1	..	..	..	..	2	2	..	1	1	 44
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2	..	1	1	 45
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	1	1	 46
..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1	 47
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 48
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	 49
35	132	167	42	136	178	62	124	186	43	122	165	63	81	144	39	106	145	57	95	152	76	87	163	Total number
32.69	35.98	35.29	32.62	35.98	35.19	32.34	36.08	34.83	31.47	35.15	34.19	32.40	36.21	34.54	33.10	36.57	35.63	31.89	36.25	34.62	31.83	35.60	33.84	Average length[1] cm

Fishing-gear	Gillnet														
Date of capture	11. VIII. 22			11. VIII. 22			20. VIII. 22			21. VIII. 22			22. VIII. 22		
Fishing-place	E of Kjelds Nor Light 4 miles of land			Off Brolykke 4 miles of land			Off Brolykke 3 miles of land			Off Lunden 3 miles of land			Off Brolykke 3 miles of land		
Depth in m	21			21			21			21			21		
Weight pro score kg	10.5			10.5			10.5			11			10.5		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm															
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
27	3	..	3	..	1	1	..	..	..	..	..	..	3	1	4
28	3	..	3	3	1	4	..	1	1	..	..	..	1	..	1
29	9	1	10	3	..	3	1	1	2	1	1	2	3	..	3
30	4	1	5	10	1	11	3	1	4	5	..	5	1	1	2
31	5	1	6	5	4	9	4	2	6	3	1	4	4	6	10
32	8	3	11	14	6	20	10	5	15	11	8	19	4	8	12
33	8	7	15	11	12	23	6	6	12	10	3	13	9	3	12
34	7	9	16	7	12	19	9	14	23	9	5	14	6	4	10
35	4	10	14	6	14	20	6	16	22	3	10	13	5	15	20
36	2	8	10	1	8	9	5	11	16	1	13	14	2	10	12
37	..	9	9	..	4	4	2	14	16	2	20	22	3	9	12
38	..	4	4	1	1	2	1	5	6	..	5	5	2	8	10
39	..	4	4	..	4	4	..	12	12	..	11	11	..	7	7
40	..	7	7	..	2	2	..	8	8	..	9	9	..	7	7
41	..	3	3	..	1	1	..	3	3	..	7	7	..	6	6
42	..	..	..	..	1	1	..	7	7	..	2	2	..	1	1
43	..	..	..	..	1	1	..	3	3	..	2	2	..	1	1
44	..	..	..	..	1	1	..	2	2	..	2	2	..	1	1
45	..	1	1	..	..	..	..	..	..	..	1	1	..	1	1
46	..	..	..	..	1	1	..	..	..	..	1	1	..	..	..
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	53	68	121	61	75	136	47	111	158	45	101	146	44	89	133
Average length[1] cm	31.53	36.03	34.06	32.11	34.95	33.68	33.38	36.66	35.68	32.78	37.21	35.84	32.70	36.28	35.10

Fishing-gear	Gillnet														
Date of capture	28. VIII. 22			29. VIII. 22			30. VIII. 22			31. VIII. 22			August 1922		
Fishing-place	Off Brolykke 4 miles of land			E of Kjelds Nor Light 3 miles of land			Off Brolykke 4 miles of land			Off Lunden 4 miles of land					
Depth in m	21			23			21			21					
Weight pro score kg	10.5			10			10			10.5					
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm													Total		
24	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25	..	..	..	2	..	2	..	..	..	..	..	..	8	3	11
26	..	..	..	..	..	..	1	..	1	..	1	1	11	7	18
27	..	1	1	1	1	2	..	1	1	1	..	1	19	10	29
28	..	3	3	1	1	2	2	..	2	1	1	2	29	24	53
29	1	4	5	2	3	5	3	1	4	4	1	5	66	36	102
30	4	7	11	6	3	9	1	3	4	2	4	6	90	63	153
31	7	1	8	3	6	9	2	4	6	3	3	6	95	83	178
32	6	4	10	4	9	13	7	8	15	13	2	15	156	128	284
33	6	11	17	9	14	23	8	8	16	3	6	9	149	176	325
34	3	11	14	3	9	12	4	6	10	4	6	10	105	191	296
35	4	15	19	3	9	12	5	12	17	2	12	14	95	219	314
36	3	15	18	2	7	9	3	13	16	1	10	11	49	232	281
37	..	11	11	1	8	9	1	15	16	..	6	6	27	227	254
38	1	11	12	1	8	9	..	10	10	..	5	5	16	152	168
39	..	12	12	..	8	8	..	10	10	..	3	3	3	172	175
40	..	4	4	..	8	8	..	9	9	..	6	6	1	118	119
41	..	6	6	..	6	6	1	7	8	..	1	1	1	108	109
42	..	3	3	..	3	3	..	1	1	..	..	..	1	55	56
43	..	2	2	..	..	..	..	1	1	..	..	..	..	34	34
44	..	1	1	..	..	..	..	..	..	..	1	1	..	21	21
45	..	1	1	..	1	1	..	..	..	..	1	1	..	11	11
46	..	..	..	..	1	1	..	..	..	..	..	..	..	7	7
47	..	..	..	..	..	..	..	..	..	..	..	..	..	3	3
48	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Total number	35	123	158	38	105	143	38	109	147	34	69	103	921	2081	3002
Average length[1] cm	32.69	35.76	35.08	31.97	35.58	34.62	32.79	36.14	35.27	31.79	35.38	34.19	32.34	35.97	34.86

[1] Not corrected by 0.5.

Table of Measurements III — Length of Plaice taken in Ristingebugt.

June–August 1922.

Fishing-gear	Skovlvaad												Gillnet					
Date of capture	4. VII. 22			5. VII. 22			9. VII. 22			July 1922			12. VI. 22			22. VI. 22		
Fishing-place	Ristingebugt 2 miles of land			Ristingebugt 2 miles of land			Ristingebugt 2 miles of land						WNW of Bagenkop 1 mile of land			W of Stenbæk 1.5 mile N of Bagenkop		
Depth in m	15			15			15						15			17		
Weight pro score kg	4.5			4			4.5						9			9		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm										Total								
25	6	7	13	4	9	13	3	1	4	13	17	30	1	..	1	..	..	..
26	15	13	28	16	7	23	9	6	15	40	26	66	..	1	1	1	..	1
27	18	6	24	16	11	27	15	5	20	49	22	71	..	3	3	..	..	..
28	13	15	28	13	4	17	11	2	13	37	21	58	..	1	1	1	1	2
29	6	14	20	8	11	19	6	7	13	20	32	52	5	3	8	..	1	1
30	5	11	16	8	9	17	4	3	7	17	23	40	3	1	4	1	2	3
31	4	11	15	1	4	5	2	5	7	7	20	27	2	10	12	1	8	9
32	3	10	13	3	10	13	..	3	3	6	23	29	2	10	12	1	5	6
33	..	2	2	2	6	8	..	..	..	2	8	10	2	4	6	..	6	6
34	..	..	..	..	6	6	..	..	..	...	6	6	..	9	9	..	5	5
35	1	3	4	..	..	..	..	..	..	1	3	4	..	5	5	4	8	12
36	..	..	..	..	2	2	..	..	..	..	2	2	..	11	11	2	9	11
37	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	1	11	12
38	..	..	..	..	..	..	..	..	..	..	..	..	..	12	12	..	9	9
39	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	12	12
40	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	..	3	3
41	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	5	5
42	..	1	1	..	..	..	..	..	..	..	1	1	..	..	..	..	6	6
43	..	..	..	..	..	..	..	..	..	..	..	..	..	4	4	..	3	3
44	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2
45	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	71	93	164	71	79	150	50	32	82	192	204	396	15	91	106	12	97	109
Average length [1] cm	27.73	29.09	28.50	27.85	29.41	28.67	27.56	28.63	27.98	27.73	29.14	28.45	30.13	35.01	34.32	33.00	36.63	36.23

Fishing-gear	Gillnet																	
Date of capture	27. VI. 22			June 1922			3. VII. 22			14. VII. 22			20. VII. 22			21. VII. 22		
Fishing-place	NW of Bagenkop 2 miles of land						WNW of Bagenkop 2 miles of land			Stenbæk, WNW of Bagenkop 2 miles of land			WNW of Bagenkop 2 miles of land			Ristingebugt 2 miles of land		
Depth in m	17						15			17			17			17		
Weight pro score kg	8.5						8.5			8			8			8.25		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm				Total														
25	..	..	..	1	..	1	..	..	..	4	..	4	3	2	5	1	..	1
26	..	..	..	1	1	2	2	..	2	7	3	10	6	..	6	1	3	4
27	1	..	1	1	3	4	1	..	1	6	3	9	6	4	10	5	4	9
28	5	2	7	6	4	10	1	2	3	10	5	15	2	3	5	1	8	9
29	4	2	6	9	6	15	2	2	4	9	10	19	6	8	14	2	1	3
30	5	5	10	9	8	17	3	10	13	14	7	21	4	4	8	4	6	10
31	3	4	7	6	22	28	1	6	7	6	9	15	7	7	14	2	8	10
32	4	11	15	7	26	33	..	4	4	10	12	22	8	11	19	4	13	17
33	4	7	11	6	17	23	2	9	11	3	14	17	3	6	9	5	7	12
34	3	16	19	3	30	33	1	2	3	5	7	12	4	8	12	..	7	7
35	1	10	11	5	23	28	1	4	5	3	14	17	2	7	9	1	7	8
36	..	8	8	2	28	30	..	4	4	1	10	11	..	7	7	..	3	3
37	..	10	10	1	26	27	..	2	2	1	3	4	..	3	3	2	5	7
38	..	2	2	..	23	23	..	4	4	..	5	5	..	3	3	..	4	4
39	..	3	3	..	19	19	..	3	3	..	8	8	..	5	5	..	3	3
40	..	2	2	..	10	10	..	4	4	..	4	4	..	1	1	..	2	2
41	..	..	..	..	7	7	..	2	2	..	1	1	..	..	..	..	5	5
42	..	1	1	..	7	7	..	..	..	..	..	..	..	..	..	..	3	3
43	..	2	2	..	9	9	..	..	..	..	1	1	..	2	2	..	1	1
44	..	..	..	..	3	3	..	1	1	..	..	..	..	..	..	..	..	..
45	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
46	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	30	85	115	57	273	330	14	59	73	79	116	195	51	81	132	28	91	119
Average length [1] cm	30.77	34.40	33.45	31.07	35.40	34.65	30.07	34.00	33.25	29.85	33.35	31.93	29.82	33.04	31.80	30.57	33.62	32.90

[1] Not corrected by 0.5.

Fishing-gear	Gillnet																	
Date of capture	28. VII. 22			July 1922			5. VIII. 22			7. VIII. 22			14. VIII. 22			15. VIII. 22 1		
Fishing-place	WNW of Bagenkop 2 miles of land						WNW of Bagenkop 2 miles of land			NW of Bagenkop 2 miles of land			W of Bagenkop 2 miles of land			NW of Bagenkop 2 miles of land		
Depth in m	15						17			17			17			18		
Weight pro score kg	8.5						10			9.5			9.5			9		
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm				Total														
25	..	..	..	8	2	10	..	..	..	..	..	..	..	..	..	..	..	..
26	..	..	..	16	6	22	1	1	2	1	..	1	..	..	..	..	..	..
27	2	2	4	20	13	33	1	1	2	3	..	3	3	2	5	2	1	3
28	3	2	5	17	20	37	3	..	3	..	3	3	3	3	6	3	2	5
29	7	4	11	26	25	51	3	3	6	3	2	5	2	1	3	2	1	3
30	8	5	13	33	32	65	8	3	11	5	3	8	3	6	9	2	6	8
31	4	4	8	20	34	54	4	2	6	4	2	6	3	4	7	3	3	6
32	4	9	13	26	49	75	6	5	11	8	10	18	4	5	9	2	1	3
33	2	3	5	15	39	54	1	4	5	10	13	23	4	7	11	2	4	6
34	3	3	6	13	27	40	3	6	9	4	17	21	3	5	8	2	2	4
35	2	5	7	9	37	46	1	6	7	1	20	21	..	10	10	..	6	6
36	1	5	6	2	29	31	2	10	12	2	13	15	2	5	7	..	2	2
37	..	4	4	3	17	20	1	12	13	3	19	22	..	8	8	..	5	5
38	..	11	11	..	27	27	1	8	9	..	21	21	..	3	3	..	2	2
39	..	5	5	..	24	24	..	7	7	2	15	17	..	7	7	..	4	4
40	..	9	9	..	20	20	..	7	7	..	11	11	..	2	2	..	3	3
41	..	4	4	..	12	12	..	9	9	..	7	7	..	4	4	..	2	2
42	..	1	1	..	4	4	..	5	5	..	3	3	..	5	5	..	4	4
43	..	3	3	..	7	7	..	2	2	..	3	3	..	3	3	..	1	1
44	..	..	..	..	1	1	..	5	5	..	..	..	..	..	..	..	..	..
45	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..
46	..	..	..	..	1	1	..	1	1	..	..	..	..	..	..	..	..	..
47	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
48	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
49	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total number	36	79	115	208	426	634	35	98	133	46	163	209	27	80	107	18	49	67
Average length[1] cm	30.75	35.44	33.97	30.11	33.83	32.61	31.34	37.09	35.58	32.30	36.21	35.35	31.11	35.35	34.28	30.39	35.29	33.97

Fishing-gear	Gillnet														
Date of capture	16. VIII. 22			18. VIII. 22			19. VIII. 22			20. VIII. 22			August 1922		
Fishing-place	W of Bagenkop 3 miles of land			WNW of Bagenkop 3 miles of land			Ristingebugt 2 miles of land			NW of Bagenkop 2 miles of land					
Depth in m	19			17			17			17					
Weight pro score kg	9.5			10			9.5			10					
Sex	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀	♂	♀	♂+♀
Length cm													Total		
25	..	..	..	..	1	1	..	..	..	..	..	..	..	1	1
26	3	..	3	2	..	2	..	..	..	..	..	..	7	1	8
27	3	1	4	1	3	4	1	1	2	..	..	..	14	9	23
28	2	6	8	3	4	7	1	..	1	3	2	5	18	20	38
29	4	4	8	4	..	4	2	4	6	2	1	3	22	16	38
30	7	2	9	2	2	4	..	4	4	3	2	5	30	28	58
31	..	3	3	3	..	3	1	2	3	2	2	4	20	18	38
32	5	2	7	6	4	10	3	..	3	..	3	3	34	30	64
33	2	1	3	5	6	11	2	7	9	3	8	11	29	50	79
34	1	4	5	3	8	11	5	2	7	2	4	6	23	48	71
35	..	2	2	1	3	4	..	6	6	1	5	6	4	58	62
36	..	2	2	1	9	10	3	11	14	3	6	9	13	58	71
37	..	1	1	..	6	6	..	4	4	1	3	4	5	58	63
38	1	1	2	..	9	9	..	5	5	..	4	4	2	53	55
39	1	2	3	1	11	12	..	3	3	1	6	7	5	55	60
40	..	4	4	..	4	4	..	1	1	..	3	3	..	35	35
41	..	4	4	..	6	6	..	2	2	..	4	4	..	38	38
42	..	1	1	..	3	3	..	1	1	..	2	2	..	24	24
43	..	2	2	..	1	1	..	1	1	..	..	..	..	13	13
44	..	..	..	..	2	2	..	..	..	..	..	..	..	7	7
45	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2
46	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2
47	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1
48	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1
49	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1
Total number	29	42	71	32	82	114	18	54	72	21	59	80	226	627	853
Average length[1] cm	30.28	34.38	32.70	31.28	36.11	34.75	32.44	35.04	34.39	32.38	36.42	35.36	31.47	35.95	34.76

[1] Not corrected by 0.5.

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